CONSTITUTIONAL CUTTING EDGE: WHERE FEDERAL PLANNING IMPLIED PREEMPTS STATE POWER

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I. CONSTITUTIONAL STAKES AT THE CUTTING EDGE

A "make or break" case moving through the federal courts is altering the Supreme Court's half-century-old non-traversable "bright line." At the federal level horizontally and for 50 states vertically, this legal bright line determines which levels of government control one of the most important technologies in America.³ This undergirds the entire U.S. economy, and is essential for each of the 16 essential sectors protected by the Department of Homeland Security. ⁴ This Article analyzes a critical case already altering the United States's legal separation of powers that will directly impact a key part of the U.S. economy,⁵ one of the three most important inventions in human history, the most complex machine ever constructed, and the most important sectors of the U.S. economy⁸ guarded by the federal government.⁹

Three 2022–2024 Supreme Court decisions sua sponte¹⁰ procedurally reconfigured the Constitution's separation of powers. In 2022, the Supreme Court created the unprecedented Major Questions Doctrine, significantly restricting Article II power over the U.S. electric system. 11 Second, the Court ended its 2024 term enjoining executive preemption, or interference with

^{1.} U.S. CONST. art. I-III.

^{2.} U.S. CONST. amend. X.

^{3.} James Fallows, The 50 Greatest Breakthroughs Since the Wheel, ATLANTIC (Nov. 2013), https://www.theatlantic.com/magazine/archive/2013/11/innovations-list/309536.

^{4.} See Energy Sector, Cybersecurity & Infrastructure Sec. Agency, https://www.cisa.gov/topics/critical-infrastructure-security-and-resilience/critical-infrastructuresectors/energy-sector (last visited Nov. 20, 2025).

^{5.} Steven Ferrey, The New Rules: A Guide to Electric Market Regulation 260-61 (2000) [hereinafter THE NEW RULES].

^{6.} Fallows, *supra* note 3.

^{7.} U.S. DEP'T OF ENERGY: QUADRENNIAL ENERGY REVIEW (QER) TASK FORCE, ENERGY Transmission, Storage, and Distribution Infrastructure 3-4 (2015) [hereinafter Quadrennial Energy Review].

^{8.} See MICHAEL BRUCH ET AL., POWER BLACKOUT RISKS: RISK MANAGEMENT OPTIONS 4 (Markus Aichinger ed., 2011). Electric power underpins the functioning of critical infrastructure, including healthcare, transportation, and military operations. Id. at 4, 10. Countries that have functionable and operational electric power systems benefit from economic growth and technological advancements that lift populations out of poverty and enable societal development. Id. Reliable electricity access strengthens national security by ensuring that the countries' military and defense infrastructure remain operational and resilient against potential threats. Id. at 10. As such, reliable electricity access correlate directly to a higher standard of living and improved quality of life, thereby distinguishing developed countries from developing countries.

^{9.} See Energy Sector, supra note 4.

^{10.} See infra Part II.B.

^{11.} West Virginia v. EPA, 142 S. Ct. 2587, 2609 (2022) (requiring an express, rather than no or implied, delegation from Congress before a federal administrative agency can create a rule or regulation dealing with a major controversial matter, a matter of substantial cost, or of significant national interest).

state power and control.¹² Finally, the Court also finished its 2024 term overruling the most-cited Supreme Court precedent over the last four decades, ¹³ thereafter ceasing to defer to presidential or federal executive branch legal rules and orders.¹⁴ This Supreme Court legal trifecta procedurally reconfigures the Constitutional bright line, reinterpreting both the Constitution's Supremacy Clause¹⁵ as well as the Dormant Commerce Clause.¹⁶

This Article analyzes the emerging critical court case on energy and its environmental impacts¹⁷ construing the scope of the Supreme Court's new Major Questions Doctrine. ¹⁸ This case also will define the scope of Article II powers now that the *Chevron* doctrine has been overruled. ¹⁹ First harnessed by Thomas Edison in 1876, electric power is one of the three most important inventions in human history. ²⁰ The U.S. electric transmission system is deemed the most complex machine ever constructed ²¹ and is critical to the operation of the American economy. ²² Electric power is an important sector of the U.S. economy ²³ and critical for health care, ²⁴ U.S. national defense utilizing electricity-guided weaponry and reconnaissance. ²⁵ The U.S. Department of Homeland Security considers 16 infrastructure sectors "critical," and each require reliable electric power. ²⁶

12. Ohio v. EPA, 144 S. Ct. 2040, 2058 (2024) (enjoining the EPA from substituting its federal implementation plans to supersede state implementation plans in 23 states that the federal agency deemed non-compliant for mitigating polluting to downwind states).

16. U.S. CONST. art. I, § 8, cl. 3 ("The Congress shall have Power . . . [t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes").

24. See Powering Health, U.S. AGENCY FOR INT'L DEV., https://web.archive.org/web/20241224200807/https://www.usaid.gov/energy/powering-health visited Nov. 21, 2025) (the current administration has deleted this webpage) ("Health-care facilities require electricity to maintain perishable supplies and power life-saving technologies. Energy is essential for preventing child and maternal deaths, controlling the HIV and AIDS epidemic, and combating infectious diseases and pandemics.").

^{13.} Loper Bright Enters. v. Raimondo, 144 S. Ct. 2244, 2307 (2024) (Kagan, J., dissenting).

^{14.} Id at 448. (overruling the 1984 Chevron Doctrine).

^{15.} U.S. CONST. art. VI, cl. 2.

^{17.} See generally Transource Pa., LLC, v. DeFrank, 705 F. Supp. 3d 266 (M.D. Pa. 2023).

^{18.} See West Virginia v. EPA, 142 S. Ct. 2587, 2616 (2022).

^{19.} See Loper Bright Enters. v. Raimondo, 144 S Ct. 2244, 2294 (2024) (Kagan, J., dissenting).

^{20.} Fallows, supra note 3.

^{21.} See Quadrennial Energy Review, supra note 7.

^{22.} THE NEW RULES, supra note 5, at 260-61.

^{23.} See BRUCH ET AL., supra note 8, at 4.

^{25.} See generally U.S. GOV'T ACCOUNTABILITY OFF., GAO-24-106831, WEAPONS SYSTEMS ANNUAL ASSESSMENT: DOD IS NOT YET WELL-POSITIONED TO FIELD SYSTEMS WITH SPEED (2024) (describing that electric-guided weaponry and reconnaissance systems rely heavily on advanced communication networks, highlighting the critical role of electricity-driven infrastructure in modern military operations and society). The Department of Defense has emphasized the importance of reliable energy resources to ensure operational readiness and mission success. Cf. id. at 231.

^{26.} See Energy Sector, supra note 4.

This Article also analyzes the significant legal impacts of a court decision reconfiguring the U.S. Constitution's²⁷ principles determining control over the nation's most important invention and technology.²⁸ Part II of this Article first examines the technologies now at issue. Part II.A details how the technology functions. Part II.B analyzes how U.S. statutory law interfaces with this technology and key Supreme Court decisions. Electric power is regulated differently than any other energy source in the United States.

Part III traces the increasingly important *Transource* decision that a state violated the Constitution's Supremacy Clause as well as the Dormant Commerce Clause by exercising traditional state land-use authority protected for the last two centuries. This case determines whether one of the three Third Circuit states²⁹ can be impliedly preempted from exercising state land-use power and restrained federally to the benefit of the two others.³⁰ At a time when the president's power to take unilateral executive actions or issue executive orders is advancing to the Supreme Court, this case presents a key issue and test.

Part IV.A analyzes in detail how a non-profit member-controlled organization subject to federal oversight recently convinced federal courts to not follow traditional U.S. law, existing regulatory orders, and Supreme Court precedents affecting U.S. energy. Part IV.B analyzes in detail the affected state's constitutional objections and legal resistance against this regulatory U-turn without prior congressional consent.³¹ Part IV analyzes relevant Supreme Court precedent:³² The Supreme Court's new Major Questions Doctrine,³³ the 2024 Supreme Court *Loper Bright* decision overruling the *Chevron* doctrine,³⁴ and the Supreme Court's 2024 injunction blocking federal preemption of 23 states' regulation of their own in-state power generation and other emission resources.³⁵

Part V examines recent criticism by the Chairman of the agency involved in this pending federal action reorienting U.S. energy and environmental law. Part V concludes by contrasting the legal directions this key case—now moving amid a half-century of contrary Supreme Court precedent affecting this important U.S. invention³⁶—now has consequences for a rapid warming

^{27.} See infra Part II.B.

^{28.} See Quadrennial Energy Review, supra note 7 (declaring electricity is at least the third most important invention in history).

^{29.} About the Court, U.S. CT. OF APPEALS FOR THE THIRD CIR., https://www.ca3.uscourts.gov/about-court (last visited Nov. 20, 2025).

^{30.} See generally West Virginia v. EPA, 142 S. Ct. 2587 (2022).

^{31.} See infra Part IV.B.

^{32.} See infra Part IV.

^{33.} See West Virginia, 142 S. Ct. at 2616.

^{34.} See Loper Bright Enters. v. EPA, 144 S. Ct. 2244, 2294 (2024).

^{35.} See Ohio v. EPA, 144 S. Ct. 2040, 2058 (2024).

^{36.} See Fallows, supra note 3.

of the planet.³⁷

II. ARRIVING AT A LEGAL PRECIPICE

A. State Versus Federal Power

Obtaining sufficient transmission line capacity to move renewable power reliably throughout U.S. states to reduce climate change will require unprecedented amounts of new infrastructure: 60% more high-voltage transmission infrastructure by 2030. That capacity must triple by 2050 if the U.S. is to meet its climate commitments by connecting sufficient amounts of large-scale wind and solar-electric power to the grid.³⁸ The capital cost of this amount of new power lines is estimated to be \$360 billion by 2030 and \$2.4 trillion by 2050.³⁹ The electric grid is considered the world's most complexly engineered infrastructure: "the grid is sometimes referred to as the world's largest machine; in 2000, the National Academy of Engineering named electrification as the greatest engineering achievement of the 20th century."

The engineering scope and complexity of this challenge is matched by an even more profound constitutionally complex conundrum confronting U.S. law: When state and local levels of government cannot agree on policy direction, which level of government ultimately is in control? An individual case⁴¹ adjudicating this state-federal conflict is unfolding in an important election swing state—Pennsylvania⁴²—over this important invention and technology.⁴³ This case pits Pennsylvania against the U.S. government attempting to allow a non-profit member-controlled corporation to restrict Pennsylvania's Tenth Amendment rights to control its own land-use.⁴⁴

1. The Settled Law

U.S. law treats electric power differently than everything else in the U.S.

^{37.} See infra Part II.B.

^{38.} See Lesley Clark et al., What the Infrastructure Deal Means for Energy, POLITICO: E&E NEWS (July 30, 2021), https://www.eenews.net/articles/what-the-infrastructure-deal-means-for-energy/.

^{39.} Id.

^{40.} See Quadrennial Energy Review, supra note 7, at 3-4.

^{41.} See Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266 (M.D. Pa 2023).

^{42.} See J. Staas Haught, What Is a Swing State, and Why Is PA the One to Watch?, GOERIE (Sept. 19, 2024), https://www.goerie.com/story/news/2024/09/17/what-is-a-swing-state-and-why-is-pennsylvania-the-most-important-one/75261014007/ ("Swing states are those in which no single political party has consistent dominance, meaning their electoral votes can swing either way depending on the election. Pennsylvania is one of the most critical swing states due to its 19 electoral votes.").

^{43.} See Quadrennial Energy Review, supra note 7.

^{44.} See infra Part II.B.

economy, including other forms of energy, as to which level of government exercises regulatory authority. Under the U.S. federalist system of government, there is a complex split on which government—federal, state or local—is in control of electric power and its infrastructure. The federal government regulates all terms and rates of operating the electric transmission system. The federal government regulates all terms and rates of operating the wholesale electric system. That states control and regulate all decisions of siting and constructing the transmission system. States regulate all terms and rates of operating the retail electric system.

This split regarding electricity in U.S. law⁵⁰ is unparalleled elsewhere in the world, although the basic multi-level federal or state system is somewhat followed by a few major countries.⁵¹ The Supreme Court declared this separation of power as a "bright line" that no case can breach: "Congress meant to draw a bright line easily ascertained, between state and federal jurisdiction," that does not require "case-by-case analysis."⁵²

2. Biden Administration Redirection and Constitutional Principles

With the Bipartisan Infrastructure Act in 2021⁵³ and the 2022 Inflation Reduction Act,⁵⁴ as well as a host of new regulations, the Biden administration redirected national policy. These changes fundamentally redirect the economy to use electric power, in lieu of fossil fuels, to achieve net-zero emissions by 2050.⁵⁵ These policies massively increase the use of electricity. They would cause electric generation capacity to double, along with transmission infrastructure, once two-thirds of all U.S. cars are electric

^{45.} See infra Part II.B.

^{46.} See infra notes 145-48.

^{47.} See infra note 80.

^{48.} See infra note 106.

^{49.} See infra note 148.

^{50.} See infra Part II.B.

^{51.} See Field Listing—Government Type, CIA: THE WORLD FACTBOOK, https://www.cia.gov/the-world-factbook/field/government-type (including significant nations with federalist forms of government, such as the United States, Canada, Mexico, Brazil, Germany, Switzerland, Argentina, Australia, and India).

^{52.} Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205, 215-16 (1964).

^{53.} See Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021) (codified at various non-contiguous sections of the U.S. Code).

^{54.} Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818 (2022) (codified at various noncontiguous sections of the U.S. Code); *see* U.S. DEP'T OF ENERGY: OFF. OF POL'Y, DOE/OP-0018, THE INFLATION REDUCTION ACT DRIVES SIGNIFICANT EMISSIONS REDUCTIONS AND POSITIONS AMERICA TO REACH OUR CLIMATE GOALS 3 (2022).

^{55.} Abi Shiva, "Building a Better Grid" DOE Initiative Outlines Plan for Nationwide Transmission, ENV'T & ENERGY INST. (July 7, 2022), https://www.eesi.org/articles/view/building-abetter-grid-doe-initiative-outlines-plan-for-nationwide-transmission.

vehicles.56

These laws would rapidly convert building heating to electricity.⁵⁷ The increasing use of artificial intelligence resources use massive additional amounts of electricity.⁵⁸ The recent shift to the U.S. from China of the bulk of the world's crypto mining uses very large amounts of U.S. electricity.⁵⁹ Attempts to rapidly substitute renewable electric generation for traditional power generation⁶⁰ are now falling critically behind schedule due to the complex transmission infrastructure issues highlighted below in this case.⁶¹

The new case analyzed in this Article implicates major pillars of the Constitution. The Supremacy Clause⁶² is reconfigured as to whether the President and federal government agencies can take unilateral control over state land-use without delegation from Congress or the state's consent; altering whether the executive branch can claim implied preemption to usurp powers held exclusively by state and local governments since the founding of the nation. Parties raise the Dormant Commerce Clause to block states

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^{56.} Estimated U.S. Capacity if 66% of All Cars Are EVs by 2050, REUTERS GRAPHICS (Jan. 2021), https://www.reuters.com/graphics/USA-WEATHER/GRIDS-AUTOS/xegvbwxzlpq/.

^{57.} TRIEU MAI ET AL., NAT'L RENEWABLE ENERGY LAB'Y, ELECTRIFICATION FUTURES STUDY: SCENARIOS OF ELECTRIC TECHNOLOGY ADOPTION AND POWER CONSUMPTION FOR THE UNITED STATES 55 (2018).

^{58.} See David Berreby, As Use of A.I. Soars, so Does the Energy and Water it Requires, YALEENVIRONMENT360, https://e360.yale.edu/features/artificial-intelligence-climate-energy-emissions (Feb. 6, 2024) ("A.I. use is directly responsible for carbon emissions non-renewable electricity and for the consumption of millions of gallons of fresh water, and it indirectly boosts impacts from building and maintaining the power-hungry equipment on which A.I. runs."). Massachusetts Senator Edward Markey has stated that A.I. comes at the "expense . . . of our planet." Id. (quoting Markey, Heinrich, Eshoo, Beyer Introduce Legislation to Investigate, Measure Environmental Impacts of Artificial Intelligence, ED MARKEY (Feb. 1, 2024), https://www.markey.senate.gov/news/press-releases/markey-heinrich-eshoobeyer-introduce-legislation-to-investigate-measure-environmental-impacts-of-artificial-intelligence). Due to this increase in energy demand, the European Union has enacted the "A.I. Act" which will require A.I. systems "to report their energy consumption, resource use, and other impacts throughout their systems' lifecycle." Id. The International Energy Agency states that A.I. data centers' electricity usage will double that of 2022, "1,000 terawatt-hours, roughly equivalent to Japan's current total consumption." Id.; see Dara Kerr, Artificial Intelligence's Thirst for Electricity, NPR (July 10, 2024), https://www.npr.org/2024/07/10/nx-s1-5028558/artificial-intelligences-thirst-for-electricity (noting that A.I. "is an electricity hog"). Google, for example, has stated that its electricity consumption has doubled over five years due to the electricity demand that powers it's A.I. centers. Id.

^{59.} Steven Ferrey, Cryptocurrency – Legally Navigating The "Highway to Hell", 30 U.C. L. ENV'T J. 25, 43 (2024).

^{60.} See Kathleen Spees et al., Brattle Grp., How States, Cities, and Customers Can Harness Competitive Markets to Meet Ambitious Carbon Goals 8, fig. 3 (2019).

^{61.} See Steven Ferrey, Legal Asynchrony: Constitutional 'Bridges' Inverting Elemental U.S. Technology, 95 Colo. L. Rev. 575, 616–17 (2024); Steven Ferrey, Reading Between the Lines of the IRA + IIJA Power Gaps, 41 PACE ENV'T L. Rev. 17, 48–49 (2023) [hereinafter Between the Lines]; Steven Ferrey, Dislocating the Separation of Powers State "Thumb" on the Biden Sustainability Initiatives & Law, 54 ARIZ. STATE L.J. 755, 788 (2002); Steven Ferrey, Flipped Constitutional Supremacy: Inferior Local Law Blocking Federal Policy, 23 UTAH L. REV. 65, 95 n. 163 (2023).

^{62.} U.S. CONST. art. VI, cl. 2.

from exercising state transmission infrastructure siting authority that benefits them rather than neighbor states. The Major Questions Doctrine, unveiled recently by the U.S. Supreme Court, ⁶³ applied to restrict federal executive branch regulation regarding electric power infrastructure and climate change, now potentially applies when there is no prior consent or delegation by Congress.

3. Implications for the Future of the Climate

Where the U.S. goes, so goes world climate change. The U.S. is the second largest emitter of greenhouse gases (GHGs),⁶⁴ the largest developed country covered by the Kyoto Protocol,⁶⁵ and a former member of the Paris Agreement during prior administrations. There is sufficient potential solar and wind power generation capacity that can be placed on U.S. land and water.⁶⁶ However, shifting rapidly to renewable power generation now confronts substantially inadequate electric transmission infrastructure to move such new power to consumers.

Based on current practices, temperatures will increase 1.5–2.5° Celsius above historical levels by 2040, and further increase 3–5° Celsius above historic levels by 2100.⁶⁷ Nations agreed in the Paris Agreement to limit global temperature increase to below 1.5° Celsius (and absolutely below 2° Celsius);⁶⁸ global GHG emissions must peak now in 2025 and be reduced by 43% by 2030.⁶⁹ Recommitting the U.S. to the Paris Agreement, in April 2021, President Biden announced a new target to reduce GHG emissions by 50% from 2005 levels by 2030.⁷⁰

Because more than 99% of GHG emissions related to electric power generation are from burning fossil fuels, 71 the Biden Administration pledged

^{63.} See generally West Virginia v. EPA, 142 S. Ct. 2587 (2022).

^{64.} See Carbon Footprint by Country 2025, WORLD POPULATION REV., https://worldpopulationreview.com/country-rankings/carbon-footprint-by-country (last visited Nov. 20, 2025).

^{65.} Kyoto Protocol, Dec. 11, 1997, 2303 U.N.T.S. 162.

^{66.} STEVEN FERREY, POWERING THE FUTURE: A LAWYER'S GUIDE TO CLEAN ENERGY 19–51 (Am. Bar Ass'n 2024) [hereinafter POWERING THE FUTURE].

^{67.} INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY 16, fig. a (H.O. Pörtner et al., eds. 2022).

^{68.} See Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104, art. II(1)(a).

^{69.} INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2022: MITIGATION OF CLIMATE CHANGE 101, fig. a (Priyadari R. Shukla et al., eds. 2022).

^{70.} See Press Release, White House, FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies (Apr. 22, 2021).

^{71.} U.S. DEP'T OF ENERGY, TRANSFORMING THE NATION'S ELECTRICITY SYSTEM: THE SECOND INSTALLMENT OF THE QUADRENNIAL ENERGY REVIEW 3-5 (2017).

to replace all U.S. fossil fuel use for electric power generation with renewable energy by 2035.⁷² To hold temperature rise below 2° Celsius, the U.S. electric power sector—responsible for slightly less than one-quarter of GHG emissions—is now legally expected to shoulder approximately two-thirds of the reduction of total U.S. GHG emissions.⁷³ According to researchers the Biden Administration relied upon to enact the Inflation Reduction Act, the U.S. will miss more than 80% of its potential warming emissions reductions if electric transmission lines are not built out quickly.⁷⁴

The next Part of this Article analyzes the key case that will determine whether the federal government can control or mandate this necessary electric infrastructure build-out in time, or whether it will fail.

B. A Federal Judge Overrules a State Judge on State Law

An administrative law judge in, and later the full Commission of, the Pennsylvania Public Utility Commission (PUC), both sequentially denied an application for a new transmission line beginning in West Virginia, travelling through Pennsylvania and ending in Maryland, after determining the project was not needed.⁷⁵ States control the rights to use land to host a new transmission line.⁷⁶ This line had been included in a plan for future transmission developed by the federally regulated PJM Independent System Operator (PJM ISO), which is a member-controlled non-profit corporation.⁷⁷

PJM ISO is delegated responsibility to exercise federal authority regionally and is regulated by the Federal Energy Regulatory Commission (FERC). PJM administers transmission rates and terms over existing transmission infrastructure to move wholesale power in 13 states from Maryland to Chicago, plus the District of Columbia.⁷⁸ PJM also assesses regional needs by methods approved by FERC, which include economic

77. See Transource Pa., LLC, 705 F. Supp. 3d at 273.

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^{72.} See Patrick Whittle & Cathy Bussewitz, Biden Faces Steep Challenges to Reach Renewable Energy Goals, ABC10 (Mar. 3, 2021), https://www.abc10.com/article/news/nation-world/biden-faces-steep-challenges-reach-renewable-energy-goals/507-051c53a3-9d35-4cc6-a0a2-4d47cd465467.

^{73.} See Electric Power Sector Emissions, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/ghgemissions/electric-power-sector-emissions#:~:text=Greenhouse%20gas%20emissions%20by%20economic%20sector%20in%202022.,M etric%20Tons%20of%20CO2%20equivalent (last updated Mar. 31, 2025) ("Electric power accounted for 24% of emissions. Total Emissions in 2022 = 6,343 Million Metric Tons of CO2 equivalent.).

^{74.} Jerusalem Demsas, *Not Everyone Should Have a Say*, ATLANTIC (Oct. 19, 2022), https://www.theatlantic.com/ideas/archive/2022/10/environmentalists-nimby-permitting-reform-nepa/671775/.

^{75.} Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 271–72 (M.D. Pa. 2023).

^{76.} See infra Part II.B.

^{78.} See State Net Import/Export Map (Hourly), PJM, https://www.pjm.com/markets-and-operations/state-import-export-map.aspx (last visited Nov. 21, 2025).

analyses.⁷⁹ Notwithstanding PJM controlling pricing and terms for moving power in the region, the states within PJM retain the power and authority over the actual physical siting, construction, and permitting for regional energy infrastructure and hardware.⁸⁰

FERC directed ISOs under its authority, including PJM, to make wholesale power supply more competitive through transmission planning and reflect that in FERC- or ISO-established transmission rates.⁸¹ FERC orders require each ISO wholesale power and transmission market to operate competitively in a non-discriminatory manner. First, FERC Order 888 created open-access non-discriminatory transmission access for all electricity produced by independent power producers, whether renewable or nuclear. 82 Second, FERC Order 2003 extended interconnection to the grid, prohibiting transmission facility owners from discriminating.83 Finally, FERC Order 1000 required ISOs to eliminate discrimination regarding transmission tariffs, but left states discretion on by whom and where transmission was cited or not cited.⁸⁴ The purpose of these FERC orders was to cause new and upgraded transmission lines with added capacity to accommodate a larger flow of lower-cost power originated in certain states to move to areas that have traditionally higher-cost local power generation. This entry of lowercost power would, in theory, lower the average cost of electric power in those higher-cost states.

A transmission developer, Transource, argued that existing transmission "congestion represents a form of rate discrimination." In other words, Transource argued that higher-cost states that had not individually paid for, nor installed enough in-state power generation for themselves, are discriminated against if other states in the region do not add transmission capacity in their states to cause lower-cost power to flow to higher-cost states over the transmission network. Some might think of this as an equity argument to assist states commensurately. 86

However, these FERC or PJM federal transmission orders operate within a zero-sum metric. As stated by Pennsylvania, other regions which benefit from the current congestion would "no longer have the benefit of [the] lower-

^{79.} See Brief of Appellee Transource Pennsylvania, LLC at 12, Transource Pa., LLC, v. DeFrank, 705 F. Supp. 3d 266 (M.D. Pa. 2023) (No. 24-1045) [hereinafter Trial Court Appellee Brief].

^{80.} See generally Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205 (1964).

^{81.} Transource Pa., LLC, v. DeFrank, 705 F. Supp. 3d 266 (M.D. Pa. 2023).

^{82.} See 18 C.F.R. § 35.28(c) (1997); see also 18 C.F.R. § 385 (1997); Between the Lines, supra note 61, at 41–42.

^{83.} Nat'l Ass'n of Regul. Util. Comm'rs v. FERC, 475 F. 3d 1277, 1283 (D.C. Cir. 2007).

^{84. 18} C.F.R. § 35.28 (2011).

^{85.} Transource Pa., LLC, 705 F. Supp. 3d at 276.

^{86.} See Trial Court Appellee Brief, supra note 79, at 11–12.

cost power."87 Moreover, there is vigorous public disagreement among FERC Commissioners about whether recent FERC transmission orders are actually increasing discrimination by creating an uneven playing field in favor of certain types of technology. In 2024, FERC Order No. 1920 directs the few ISO and Regional Transmission Operator (RTO) transmission providers to submit compliance filings within 10–12 months—an effort to capacity.88 rapidly facilitate additional electric transmission FERC Commissioner Christie's dissent argued that Order No. 1920 violates the Federal Power Act, "infringing on the authority of states," and "was built on what may be a foundation of sand known as 'Chevron deference.'"90 Christie also asserted that the Federal Power Act inflicts staggering costs on consumers by promoting the transmission projects' construction with trillions of dollars to serve a major policy agenda never passed by Congress, for politically-preferred types of generation policies.⁹¹

It was not lost on the Pennsylvania PUC that relief of economic congestion on a regional level would likely result in higher utility rates from new lines transmitting otherwise low-cost power from the state. ⁹² In denying such additional lines to cross Pennsylvania, the Pennsylvania PUC's administrative law judge concluded that "'[e]conomic congestion is not a form of rate discrimination, rather, it is a market-based response to a variety of factors."

Transource sued in the Federal District Court for the Middle District of Pennsylvania, claiming the Pennsylvania PUC order was federally preempted and impermissibly discriminatory. Transource argued that: (1) Pennsylvania was conflict preempted by the Supremacy Clause of the Constitution when it issued any order or decision that conflicted with the

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^{87.} Transource Pa., LLC, 705 F. Supp 3d at 275 (quoting defendants' internal court filing).

^{88.} Building for the Future Through Electric Regional Transmission Planning and Cost Allocation, Order No. 1920, 187 FERC \P 61,068 (2024) (to be codified at 18 C.F.R. pt. 35). Transmission providers are required to file compliance filings within 10 months of the effective date of the Final Rule for all compliance requirements except those related to interregional planning coordination, and within 12 months of the effective date for interregional coordination requirements. *Id.* \P 12.

^{89.} *Id.* ¶ 30 (Christie, Comm'r, dissenting); *see id.* ¶ 48–49 (by "recast[ing] FERC as a national IRP planner with extraordinary powers to oversee and dictate to all public utility transmission providers in the country . . . detailed instructions on planning transmission that fulfills the current administration's preferred policies as to the types of generation it wants to build, and to charge consumers trillions of dollars for this transmission.").

^{90.} Id. ¶ 33 (Christie, Comm'r, dissenting).

^{91.} See id. ¶ 3(footnotes omitted); see also id. ¶ 30 (Christie, Comm'r, dissenting) ("The [Order] is just a pretext for enacting the current presidential administration's 'net-zero 2035' policy agenda, as well as that of large corporate buyers of preferential power and other special interests."); id. ¶ 49 ("[T]he final rule is just a pretext for enacting this administration's 'net zero 2035' policy agenda, as well those of corporate and other special interests.").

^{92.} See Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 276-78, 296 (M.D. Pa. 2023).

^{93.} Id. at 276 (quoting the Pennsylvania PUC's decision).

federally-regulated PJM plan for a new transmission line; and (2) the Dormant Commerce Clause of the Constitution was violated when Pennsylvania issued an order that favored in-state Pennsylvania ratepayers retaining their own in-state power while not equally benefiting out-of-state electric ratepayers.⁹⁴

This case showcases issues of first impression that the Supreme Court will need to resolve eventually. This case stress-tests the Supreme Court's "bright line" between federal and state power; oncerning one of the most important inventions in U.S. history—electric power. It directly affects the future of what is considered the most significant engineering achievement in history—the U.S. transmission grid.

This case takes on an additional infrastructure dimension with FERC Commissioner Christie, who alleged that this case is related to discrimination in favor of certain types of electric power. ⁹⁷ Ultimately, this case alone could reconfigure the vertical separation of powers under U.S. law between state Tenth Amendment reserved land-use jurisdiction and federal climate and infrastructure plans. This case effects the future of the U.S. electric power system and who is in control when many states do not agree with the federal government about its needs and future course.

C. Law Regulating the Most Complex Engineered Machine

1. The Machine and Its Future

Our most important engineered machine now confronts the U.S. Constitution, the degree of horizontal separation of powers between both the Executive Branch and Congress, and the vertical separation of powers between state and federal legal control. Punctuating this issue is the evolving scope of the new Major Questions Doctrine applied to the U.S. electric grid:

Today, the U.S. transmission and distribution system is a vast physical complex of interlocked machines and wires, with a correspondingly complex set of institutions overseeing and guiding it through policies, statutes, and regulations. The U.S. grid delivers approximately 3,857 terawatt-hours [or trillion watt-hours] of electrical energy from electric power generators to 159 million residential, commercial, and industrial customers. This is

95. See Federal Power Act, Pub. L. No. 66-280, 41 Stat. 1063 (1920).

^{94.} *Id*.

^{96.} See Quadrennial Energy Review, supra note 7.

^{97.} See Building for the Future Through Electric Regional Transmission Planning and Cost Allocation, supra note 88, ¶ 33.

accomplished via 19,000 individual generators at about 7,000 operational power plants in the United States with a nameplate generation capacity of at least one megawatt (MW). These generators send electricity over 642,000 miles of high-voltage transmission lines and 6.3 million miles of distribution lines. Together with its electric generation component, the grid is sometimes referred to as the world's largest machine; in 2000, the National Academy of Engineering named electrification as the greatest engineering achievement of the 20th century.⁹⁸

Adding to this complexity, electricity demand will expand at unprecedented rates: Electricity is forecast to increase from approximately 20% of primary energy use in the U.S. to 40–50% of all energy use. ⁹⁹ This increasing amount of power cannot be handled by the existing transmission grid: "transmission line capacity would have to be tripled through 2050 to connect the needed amount of wind and solar power to the grid," the world's most complexly engineered infrastructure. ¹⁰⁰ A study determined that the intermediate step "would require a 60% expansion of the U.S. high-voltage transmission network no later than 2030," and capacity to triple by 2050 to move sufficient renewable power generation to the grid. ¹⁰¹ The capital cost of these new power lines stands out—\$360 billion by 2030 and \$2.4 trillion by 2050. ¹⁰²

These changes don't happen in isolation. Electric power is one of the most highly regulated sectors of the U.S. economy. Transmission infrastructure siting and permitting is historically within the exclusive legal jurisdiction of states; some states and municipalities will not sanction new large transmission projects over their lands to transmit power for use in other states. ¹⁰³ Some states are not convinced that FERC or private ISOs will unfairly charge them for the cost of new regional transmission lines, which

103. See Transmission Siting and Permitting Efforts, U.S. DEP'T OF ENERGY: GRID DEPLOYMENT OFF., https://www.energy.gov/gdo/transmission-siting-and-permitting-efforts (last visited Nov. 20, 2025) (providing that "[t]he siting and permitting of interstate and inter-regional high-voltage transmission typically requires action by many different authorities governing the federal, state, local, tribal, and private lands that facilities will pass through"); Issue Brief: Electric Transmission Infrastructure, CRES FORUM (July 20, 2023), https://cresforum.org/publications/issue-brief-electric-transmission-infrastructure/ (noting that "states are often reluctant to allow projects to be cited without any direct benefits to the state or its municipalities").

^{98.} See Quadrennial Energy Review, supra note 7, at 3-4.

^{99.} See RESOURCES FOR THE FUTURE, RFF Live | Future Generation: Exploring the New Baseline for Electricity in the Presence of the IRA, (YouTube, Feb. 16, 2023), https://www.youtube.com/watch?v=NtBB3CGMTCo.

^{100.} What the Infrastructure Deal Means for Energy, supra note 38.

^{101.} See id.

^{102.} *Id*.

primarily serve to send their low-cost power to other states.¹⁰⁴ FERC on occasion has allocated costs of new transmission projects proportionately to all in a multi-state ISO or RTO without disaggregating more precisely, which consumers are directly benefited.¹⁰⁵

2. States Through a Different Legal Lens

Digging deeper: Obscured in *Transource*, Pennsylvania finds itself within the PJM 13-state transmission matrix. Prior to the current legal matter, Pennsylvania already exported substantially more megawatt-hours of power from and through its state land than any other state. ¹⁰⁶ Pennsylvania already transmits through its state about 65% more exported electricity than the next highest state. ¹⁰⁷

In 2022, conventional technologies in Pennsylvania of natural gas generated 54.5% of all in-state electric power, coal 9.5%, and nuclear power 32% of the state total. The total share of these conventional technologies comprised 96% of all Pennsylvania power generation. Although the percentage of renewable-power generation in neither period in Pennsylvania came close to matching the nationwide percentage; over 20% of U.S. electric-power generation was supplied by renewable technologies. 110

Neither wind nor solar is as reliable as fossil-fired or nuclear generation throughout all hours of the day. U.S. wind turbine capacity factors (the percentage of the potential output actually realized in output) range from 20–40% of constant generation capacity; with other sources reporting a wider range of 5–50% and averaging 38%. Lazard calculates capacity factor ranges for onshore wind power turbines as 38–55%, offshore wind turbines as 48–52%, and fixed solar panels at 13–23% (depending on where in

^{104.} See Lawrence Susskind et al., Sources of Opposition to Renewable Energy Projects in the United States, ENERGY POL'Y, June 2022, at 2, 5 (analyzing how several utility-scale renewable energy projects face multiple sources of local opposition).

^{105.} See Ill. Com. Comm'n v. Fed. Regul. Comm'n, 721 F.3d 764 (7th Cir. 2013).

^{106.} INDEP. FISCAL OFF., PENNSYLVANIA ELECTRICITY UPDATE 1 (2023) (data is from U.S. Department of Energy, Energy Information Administration).

^{107.} Id.

^{108.} Id.

^{109.} Id.

^{110.} Renewable Energy Pillar, U.S. DEP'T OF ENERGY, https://www.energy.gov/eere/renewable-energy#:~:text=Renewable%20Energy%20in%20the%20United,that%20percentage%20continues%20t o%20grow (last visited Nov. 21, 2025).

^{111.} RENEWABLE ENERGY RSCH. LAB., UNIV. OF MASS. AT AMHERST, WIND POWER: CAPACITY FACTOR, INTERMITTENCY, AND WHAT HAPPENS IF THE WIND DOESN'T BLOW?; See Wind Energy Factsheet. UNIV. OF MICH: CTR. FOR SUSTAINABLE Sys. 2025), (Sept. https://css.umich.edu/publications/factsheets/energy/wind-energy-factsheet; Richard Bowers Owen Comstock, 2020 Could be a Record Year for U.S. Wind Turbine Installations, U.S. ENERGY INFO. ADMIN. (Nov. 12, 2020), https://www.eia.gov/todayinenergy/detail.php?id=45856.

proximity to the equator the solar panels are located). Solar photovoltaic power panels in a fixed position achieve lower capacity factors than wind power and require even more land to produce the same power output.

Solar and wind technologies now dominate new power construction in the U.S. Wind and solar are 500–1000% less dense energy sources than fossil fuels, and require approximately 400–1000% more land to generate a similar amount of electricity as fossil fuels. ¹¹⁴ "For the energy they produce, wind turbines have a disproportionately large footprint on land. At 72.1 kM2 /tW (square kilometers per terawatt), wind's footprint is bigger than natural gas, or coal or petroleum (at 18.6, 9.7 and 44.7 kM2/tW, respectively)." ¹¹⁵ The comparative footprint for production of electricity by renewable wind, hydro, and conventional solar generation requires more land, compared to fossil and nuclear power generation. ¹¹⁶

A necessary requirement for more land means more local and state legal control used for siting these technologies. Some states and their municipalities resist additional large transmission projects traversing their land to assist other states. ¹¹⁷ It is never transparent until FERC or ISOs assess such a "pass-through" state a share of the costs of expensive new regional transmission lines, from which the host pass-through state may perceive no demonstrable local benefit. ¹¹⁸ There are hundreds of billions of dollars of costs for new transmission infrastructure that FERC, through regional ISOs or RTOs, must allocate to some states' ratepayers as part of their electric bills

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^{112.} See Lazard, Lazard's Levelized Cost of Energy Analysis—Version 14.0 17 (2020).

^{113.} What Is Capacity Factor and How Do Solar and Wind Energy Compare?, WHATNEXTNOW, https://www.whatnextnow.com/home/solar/what-is-capacity-factor-and-how-does-solar-energy-compare (last visited Nov. 21, 2025) (showing solar capacity factors 10–25%, wind turbines 25%, hydroelectric power 40%, coal-fired power 70%, nuclear 89%); Natanael Bolson et al., Capacity Factors for Electrical Power Generation from Renewable and Nonrenewable Sources, PNAS, Dec. 20, 2022, at 1 (showing that one W of fossil electricity generation capacity if replaced by solar or wind power because of their lower capacity factors requires installation of four solar photovoltaic panels or two W of wind power).

^{114.} See Hannah Ritchie, How Does the Land Use of Different Electricity Sources Compare?, OUR WORLD IN DATA (June 16, 2022) (solar photovoltaic power land requirements compared to natural gas-fired power land requirements), https://ourworldindata.org/land-use-per-energy-source; Uma Outka, The Renewable Energy Footprint, 30 STAN. ENV. L.J. 241, 243 n. 7 (2011) (citing Robert I. McDonald et al., Updated Energy Sprawl Numbers for the American Clean Energy and Security Act, PLOS ONE, Aug. 26, 2009, at 4 (fig. 3))

^{115.} Dustin Solberg, *Wind's Big Footprint: Clean Energy Still Needs Safeguards for Nature*, THE NATURE CONSERVANCY: COOL GREEN SCI. (Nov. 29, 2017), https://blog.nature.org/2017/11/29/winds-big-footprint-clean-energy-still-needs-safeguards-for-nature.

^{116.} See Outka, supra note 114, at 243 n. 7 (citing McDonald et al., supra note 114, at 4 (fig. 3)). Land required was biomass (134,270 acres), wind (17,810 acres), hydropower (13,334 acres), petroleum (11,048 acres), solar thermal (3,787 acres), coal (2,565 acres), geothermal (1, 847 acres), and nuclear power (585 acres). Id.

^{117.} Cf. Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 276-78, 296 (M.D. Pa. 2023).

^{118.} See Lawrence Susskind et al., supra note 104.

for service.119

The federal government¹²⁰ and certain state governments significantly subsidize wind and solar technologies.¹²¹ States with already stable and reliable internal electric power supply may be skeptical of their state's need for more transmission lines. PJM in *Transource* stated that the purpose of proposed new lines is to relieve transmission congestion.¹²² These additional upgraded lines and transmission infrastructure seek to move more power out of Pennsylvania to share even more of the state's reliable fossil- and nuclear-fired power regionally with other states.¹²³

PJM states that this greater movement of power will lower the importing states' costs for power by having cheaper power moved to them through or from Pennsylvania. Pennsylvania, in an independent analysis, found that electric consumers will see their costs increase because the federal transmission cost allocations create a zero-sum outcome. Both the Pennsylvania PUC administrative law judge, as well as the full Pennsylvania PUC, found this analysis compelling. PJM nor any other party in the legal proceeding rebutted this fact.

Data from Pennsylvania's Independent Fiscal Office illustrates that Pennsylvania and its neighboring state, West Virginia, have not transitioned as quickly to renewable fuel sources in the past five years as have all 50 U.S. states. Burning fossil fuels to generate electric energy locally emits criteria pollutants that, if in amounts in a region above U.S. EPA standards, can

^{119.} See Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, 87 Fed. Reg. 26504, 26540 (May 4, 2022) (allocating "costs among public utility transmission providers whose local or regional transmission facilities the new proposed regional transmission facility or facilities would displace in proportion to their share of the total benefits").

^{120.} POWERING THE FUTURE, supra note 66, at 119–48 (discussing Inflation Reduction changes to the federal tax code to support renewable energy).

^{121.} *Id.* at 168 (discussing in detail state Renewable Energy Credit); *id.* at 187–88 (discussing in detail metering credits); *see* Steven Ferrey, *Tightening the Legal 'Net': The Constitution's Supremacy Clause Straddle of the Power Divide,* 10 MICH. J. ENV'T & ADMIN. L. 415, 415 (2021) (discussing state net metering); *see also* Steven Ferrey, *Legal History Repeats Itself on Climate Change,* 33 GEO. ENV'T L. REV. 489 (2022) (regarding state Renewable Energy Credits).

^{122.} See Trial Court Appellee Brief, supra note 79, at 14.

^{123.} *Id*.

^{124.} See Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 288–89 (M.D. Pa. 2023); see also Trial Court Appellee Brief, supra note 79, at 14–15.

^{125.} See Transource Pa., LLC, 705 F. Supp. 3d at 276–77; see also Trial Court Appellee Brief, supra note 79, at 12–14; Appellants' Reply Brief at 22–23, Transource Pa., LLC v. DeFrank (3d Cir. 2024) (No. 24-1045).

^{126.} See Transource Pa., LLC, 705 F. Supp. 3d. at 288–89; see also Brief for Amicus Curiae PJM Interconnection, L.L.C. Supporting Appellee and Supporting Affirmance at 9, Transource Pa. LLC v. DeFrank (3d Cir. 2024) (No. 24-1045) [hereinafter PJM Brief].

endanger public health.¹²⁷ Nuclear power radiation and spent nuclear fuel also must be managed carefully to protect public health.¹²⁸ There is no federal repository for the still-dangerous spent nuclear fuel from electric power reactors;¹²⁹ the fuel is now indefinitely stored at or behind nuclear power reactors in Pennsylvania and in other states.¹³⁰ By exporting a larger amount of power at prices approved by PJM and FERC, Pennsylvania as a major exporter still remains most proximately affected by any emissions and pollutants expelled from its generation facilities.

The data illustrates that Pennsylvania exported 33.8% of the power it generated in-state. Even though this is a lower percentage than that of instate power generation exported by West Virginia, Pennsylvania, as a much larger state, exported approximately four times as many megawatts of power in comparison. This is the largest amount of net exported electric power (net equals exports minus imports). Pennsylvania, more than any other state in the nation, functions as the pass-through state "poster-child" in the U.S. electric grid. Interstate transmission lines spanning Pennsylvania allow other bordering states to take advantage of Pennsylvania land. These lines function as a high-voltage electric extension cord to serve non-Pennsylvania electricity consumption needs. Pennsylvania also was regarded as a key swing state in recent presidential elections.

Placing this in larger regional PJM context, Pennsylvania and West Virginia are two states in PJM's 13-state (plus the District of Columbia) constellation, which support the rest of the PJM states with electric power. Data from Pennsylvania's Independent Fiscal Office illustrates the recent export and import status of these states, which have their collective transmission and sale of wholesale power in each of these states, collectively managed by the federally regulated PJM ISO. The data also shows imports by the bordering state of New York. Pennsylvania exported a net 81 million MWh of electric power, and alone supplied 92.5% of the total electricity imports required by all four of largest states bordering

^{127.} See Steven Ferrey, Environmental Law: Examples & Explanations 618 (Fig. 12.6), 619 (Fig. 12.7) (9th ed. 2022) [hereinafter Environmental Law].

^{128.} Id. at 613.

^{129.} See id. at 614.

^{130.} Id. at 615.

^{131.} INDEP. FISCAL OFF., supra note 106, at 1.

^{132.} Id.

^{133.} See Penn. Pub. Util. Comm'n, Transmission Line Siting, the PUC and the Role of Residents (2018); see generally PJM, Regional Transmission Expansion Planning: Planning the Future of the Grid, Today (2019) [hereinafter Regional Transmission Expansion Planning].

^{134.} Id

^{135.} INDEP. FISCAL OFF., supra note 106, at 1.

^{136.} Id.

^{137.} *Id.*

Pennsylvania: New York, New Jersey, Maryland, and Ohio. West Virginia alone exports enough power to supply 43% of all the power imports required by Virginia, which does not border Pennsylvania. 138

Pennsylvania's electric power demand situation is not static; some of the largest corporations in the world are now acquiring new business resources located in Pennsylvania and have chosen to be powered by Pennsylvania's existing in-state conventional baseload power-generation resources. In September 2024, Microsoft Corporation and Constellation Energy announced an agreement to restart Constellation's Unit 1 nuclear reactor at Three Mile Island in Pennsylvania. It was closed in 2019, and will power future Microsoft data centers in Pennsylvania and provide Artificial Intelligence services. 139 In March 2024, Amazon Web Services bought a large data center campus from Talen Energy that can utilize 960 MW and will be powered by the 2,494 MW Susquehanna nuclear plant in Pennsylvania. 140 If new transmission lines are sited to transmit more of Pennsylvania's in-state power to external states, Pennsylvania businesses and consumers could be subject to changing or higher electricity prices. Pennsylvanians could also lose the reliability of these in-state baseload generation sources, which are 96% of Pennsylvania's generation capacity. 141

Pennsylvania, West Virginia, and Virginia successfully opposed in the federal courts prior additional transmission lines proposed through them to serve states importing electricity. This resulted in the Federal Circuit Court of Appeals in 2009 blocking federal PJM and FERC attempts to federally preempt these states' decisions rejecting additional transmission lines on their land. That decision is cited by both parties in *Transource* regarding additional transmission lines proposed now. However, the *Transource* Court did not follow that precedent.

139. Constellation to Launch Crane Clean Energy Center, Restoring Jobs and Carbon-Free Power to the Grid, CONSTELLATION (Sept. 20, 2024), https://www.constellationenergy.com/newsroom/2024/Constellation-to-Launch-Crane-Clean-Energy-Center-Restoring-Jobs-and-Carbon-Free-Power-to-The-Grid.html.

^{138.} *Id*.

^{140.} Allison Good, *Talen Energy Sells Pa. Datacenter Campus to Amazon Web Services for \$650 Million*, S&P GLOBAL (Mar. 4, 2024), https://www.spglobal.com/market-intelligence/en/news-insights/articles/2024/3/talen-energy-sells-pa-datacenter-campus-to-amazon-web-services-for-650m-80711401.

^{141.} INDEP. FISCAL OFF., supra note 106, at 1.

^{142.} See Piedmont Env't Council v. FERC, 558 F.3d 304, 319–20 (4th Cir. 2009); see also Cal. Wilderness Coal. v. U.S. Dep't of Energy, 631 F.3d 1072, 1106–07 (9th Cir. 2011).

^{143.} Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 290, 295 (M.D. Pa. 2023); see Appellants' Reply Brief at 13, Transource Pa., LLC v. DeFrank (3d Cir. 2024) (No. 24-1045).

3. The Law

The Tenth Amendment of the Constitution¹⁴⁴ and the Federal Power Act of 1935, ¹⁴⁵ provide that local government enjoys exclusive control via its police power to exercise jurisdiction over all electric facility land-use and siting. ¹⁴⁶ Moreover, state government has exclusive jurisdiction over the distribution of power (similar to, but distinguished legally from, ¹⁴⁷ the transmission of power). ¹⁴⁸ Notably, FERC does not have traditional constitutional nor statutory jurisdiction over the siting and construction of interstate transmission facilities—the lines, poles, transformers, and protective equipment that are the physical hardware of the electric grid. ¹⁴⁹

The Constitution does not grant land-use power to the federal government. The Federal Power Act similarly does not grant FERC or the federal government such power. The Act takes the additional prohibitive step of expressly reserving any electric power jurisdiction not expressly allocated to FERC to remain exclusively with the states. Both parties in *Transource* concede these basic facts about reserved siting power to state governments.

The Act provides FERC exclusive federal authority only over transmission transactions, contractual terms, and prices for sales of power over existing physical electric transmission system lines.¹⁵³ The Act delegates FERC to exercise exclusive jurisdiction over the "transmission of electric energy in interstate commerce" and over "all facilities for such transmission or sale of electric energy"¹⁵⁴ This jurisdiction regarding the financial terms of transactions over transmission facilities does not expressly nor impliedly include jurisdiction over the physical siting and construction

^{144.} U.S. CONST. amend. X.

^{145.} See generally 16 U.S.C. § 824.

^{146.} See What FERC Does, FERC, https://www.ferc.gov/what-ferc-does (last updated June 18, 2025).

^{147.} See Steven Ferrey, Law of Independent Power: Development, Cogeneration, Utility Regulation § 5:10 (2025) [hereinafter Law of Independent Power]; cf. Environmental Law, supra note 127, at 609; The New Rules, supra note 5, at 23.

^{148.} See Pub. Util. Dist. No. 1 of Snohomish Cnty. v. FERC, 471 F.3d 1053, 1058 (9th Cir. 2006), vacated, 547 F.3d 1081 (9th Cir. 2008); Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 76 Fed. Reg. at 49,842, 49,861 (Aug. 11, 2011) (codified at 18 C.F.R. pt. 35).

^{149.} Transmission Owning and Operating Public Utilities, 76 Fed. Reg. at 49,861.

^{150.} Cf. LAW OF INDEPENDENT POWER, supra note 147, § 5:10.

^{151.} Id.

^{152.} Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 290 (M.D. Pa. 2023).

^{153.} See 16 U.S.C. §§ 824–25.

^{154. 16} U.S.C. § 824(b); Conn. Light & Power Co., 71 FERC ¶¶ 61,035, 61,149 (1995); Cent. Vt. Pub. Serv. Corp., 84 FERC ¶¶ 61,194, 61,973–75 (1998); Niagara Mohawk Power Corp., 100 FERC ¶¶ 61,019, 61,042 (2002); Entergy Servs., Inc., 120 FERC ¶¶ 61,020, 61,061 (2007); Aquila Merch. Servs., Inc., 125 FERC ¶¶ 61,175, 61,926–27 (2008).

of new or upgraded interstate transmission facilities. The physical assets—lines, poles, transformers, and protective equipment—are not part of the Act's grant of federal jurisdiction. ¹⁵⁵

Federal jurisdiction cannot intrude into state regulation of retail transactions in power nor into exclusive state jurisdiction over decisions on the physical hardware and construction of transmission facilities themselves, unless they are sited on federally-owned lands where states have no jurisdiction. The U.S. Supreme Court held that "Congress meant to draw a bright line easily ascertained, between state and federal jurisdiction," that does not require "case-by-case analysis." It does not make any difference whether a state acts through its legislature or its PUC energy regulatory agency. The Act creates this "bright line" between state and federal jurisdiction with wholesale power sales falling on the affirmative federal side of the line.

Pursuant to the Tenth Amendment, local government exclusively exercises its police power over all electric facility land-use and siting authority. Additionally, the distribution of power, as opposed to the transmission of power, is regulated by the states exclusively. Prior to limited exceptions created by the Biden Administration's 2021 Infrastructure Investment & Jobs Act, the but not yet challenged, this hardware and its siting

156. See Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 76 Fed. Reg. 49,842, 49,955 (Aug. 11, 2011) (codified at 18 C.F.R. pt. 35) (requiring "nondiscriminatory access to transmission" infrastructure by customers). The federal government controls all permitting for development on federal lands. U.S. CONST. art. IV, § 3, cl. 2. The Property Clause gives Congress authority over federal property generally, and the Supreme Court has described Congress's power to legislate under this Clause as "without limitations." Kleppe v. New Mexico, 426 U.S. 529, 539 (1976) (quoting United States v. City & Cnty. of S.F., 310 U.S. 16, 29 (1940)).

^{155.} *Id*.

^{157.} Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205, 215-16 (1964).

^{158.} See Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n, 461 U.S. 190, 215 (1983).

^{159.} S. Cal. Edison Co., 376 U.S. at 215-16.

^{160.} Pub. Util. Dist. No. 1 of Snohomish Cnty. Wash. v. FERC, 471 F.3d 1053, 1066 (9th Cir. 2006), vacated, 547 F.3d 1081 (9th Cir. 2008); Pub. Util. Dist. No. 1 of Snohomish Cnty. v. Morgan Stanley Cap. Grp. Inc., 547 F.3d 1081 (9th Cir. 2008), vacating in light of Morgan Stanley Cap. Grp. Inc. v. Pub. Util. Dist. No. 1 of Snohomish Cnty., 554 U.S. 527, 553–55 (2008) (criticizing the reasoning of the Ninth Circuit's decision, but nonetheless upholding that FERC has exclusive authority, and responsibility, over wholesale rates).

^{161.} See What FERC Does, supra note 146.

^{162.} See LAW OF INDEPENDENT POWER, supra note 147, § 5:10; see also ENVIRONMENTAL LAW, supra note 127, at 609; THE NEW RULES, supra note 5, at 23.

^{163.} See Pub. Util. Dist. No. 1 of Snohomish Cnty. v. FERC, 471 F.3d 1053, 1058 (9th Cir. 2006), vacated, 547 F.3d 1081 (9th Cir. 2008); Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 76 Fed. Reg. 49,842, 49,842 (Aug. 11, 2011) (codified at 18 C.F.R. pt. 35).

^{164.} See Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021) (codified at various noncontiguous sections of the U.S. Code).

on U.S. land remained within exclusive state or local authority pursuant to the Federal Power Act. 165

It remains unclear whether the 2025 Trump Administration will support, and its Department of Justice defend, federal assertion of any preemptive authority over state and local reserved authority regarding land-use and transmission. In an April 9, 2025, memo to all federal agencies, captioned "Directing the Repeal of Unlawful Regulations," President Trump directed all agencies to review and repeal any regulations that now appear unconstitutional, exceed statutory authority, or intrude on state jurisdiction, after ten recent Supreme Court decisions. ¹⁶⁶ The two most important recent Supreme Court decisions regarding administrative law are *Loper Bright Enterprises v. Raimondo* and *West Virginia v. EPA*. ¹⁶⁷ These Supreme Court decisions, recently elevated to leverage repeal of pre-existing federal regulations and orders are analyzed in this Article.

III. THE NEW FEDERAL COURT DECISION

A. Preemption of State Exclusive Jurisdiction?

How did we get to the *Transource* case? As part of its multi-state planning function, PJM included the Transource transmission project in its 2016 regional transmission plan as an efficient, cost-effective project to address persistent congestion identified in forward-looking economic studies. In 2021, pursuant to long-established state siting law, the Pennsylvania Public Utility Commission (PUC) determined that it must independently assess PJM's conclusion that the project will be regionally beneficial. The PUC concluded that the project was not "needed" when applying Pennsylvania's transmission siting law, and denied Transource's application pursuant to state law.

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^{165.} See Federal Power Act, Pub. L. No. 66-280, ch. 285, § 19, 41 Stat. 1063, 1073 (1920) (codified as amended at 16 U.S.C. §§ 791–828).

^{166.} Memorandum on Directing the Repeal of Unlawful Regulations, 2025 DAILY COMP. PRES. DOCS. 202500466 (Apr. 9, 2025). The memorandum reference these Supreme Court cases as determining what is illegal: Loper Bright Enterprises v. Raimondo, 144 S. Ct. 2244 (2024); West Virginia v. EPA, 142 S Ct. 2587 (2022); SEC v. Jarkesy, 603 U.S. 109 (2024); Michigan v. EPA, 576 U.S. 743 (2015); Sackett v. EPA, 598 U.S. 651 (2023); Ohio v. EPA, 144 S. Ct. 2040 (2024); Cedar Point Nursery v. Hassid, 594 U.S. 139 (2021); Students for Fair Admissions v. Harvard, 600 U.S. 181 (2023); Carson v. Makin, 596 U.S. 767 (2022); and Roman Cath. Diocese of Brooklyn v. Cuomo, 592 U.S. 14 (2020).

^{167. 144} S. Ct. 2244 (2024); 142 S. Ct. 2587 (2022).

^{168.} Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 274–75 (M.D. Pa. 2023) (quoting internal court filing).

^{169.} See Pennsylvania, STATE POWER PROJECT, https://statepowerproject.org/pennsylvania/ (last visited Dec. 15, 2025).

^{170.} Transource Pa., LLC, 705 F. Supp. 3d at 276–77; see Opening Brief for Appellants, Transource Pa., LLC v. DeFrank, (3d Cir. 2024) (No. 24-1045), at 14–18 [hereinafter AG Brief].

In December 2023, on appeal of the PUC decision, the Federal District Court found that the PUC's order "clearly overlap[ped] with PJM's regional transmission planning analysis." The Court held that the lower level of government must yield and was preempted by the Federal Power Act because it "pose[d] obstacles to FERC's pursuit of" transmission efficiency. The Court also held that the PUC's denial violated the Dormant Commerce Clause because it was "focused on protecting the interests of Pennsylvanians" and "rooted in economic protectionism."

Both parties in the *Transource* matter conceded¹⁷⁴ that the Constitution does not grant land-use power to the federal government under the Commerce Clause.¹⁷⁵ They also conceded that the Federal Power Act does not grant FERC power over transmission infrastructure siting (absent a recent Biden Administration amendment to Section 216 of the Act applying to high impact corridors not involved in this case), instead expressly reserving to the states any electric power jurisdiction not expressly allocated to FERC.¹⁷⁶ With this admission by both parties, there is no statute nor precedent to find in favor of Transource. Notwithstanding this, federally regulated PJM (a non-profit corporation controlled by its members), supported finding a new implied federal power to supersede traditional state and local jurisdiction.¹⁷⁷

There are three types of federal preemption: express preemption, implied field preemption, and implied conflict preemption. Starting with field preemption precedent, in *Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Commission*, 179 the plaintiff utility company challenged a California statute that conditioned the construction of nuclear power plants on findings by a state agency that storage facilities and disposal means for spent nuclear waste were adequate and available. Pacific Gas & Electric Company (PG&E) argued that the Atomic Energy Act. 180 impliedly preempted the state statute. Specifically, PG&E claimed that because the federal statute regulates the construction of nuclear plants and is predicated, in part, on radiological health and safety concerns, it comprehensively regulates a field reserved to Congress by the Atomic Energy Act. 181

^{171.} Transource Pa., LLC, 705 F. Supp. 3d at 293.

^{172.} Id. at 289, 293.

^{173.} Id. at 296.

^{174.} See id. at 290-91.

^{175.} See LAW OF INDEPENDENT POWER, supra note 147, § 5:10.

^{176.} Id.

^{177.} See Transource Pa., LLC, 705 F. Supp. 3d at 284-90.

^{178.} ENVIRONMENTAL LAW, supra note 127, at 188–95.

^{179. 461} U.S. 190 (1983).

^{180. 42} U.S.C. § 2011.

^{181.} Id. §§ 2011–2013.

The Court found that notwithstanding this implied field preemption of radiological health and safety, it remains within this latter state power that states traditionally govern the need for power facilities, their economic feasibility, cost recovery and allocation, and rates and services. 182 Of note, nuclear power is much more regulated, not only by FERC if it engages in wholesale sales or transmission of wholesale power, but also by: (1) the Nuclear Regulatory Commission (NRC) pursuant to the Atomic Energy Act regarding siting, (2) the Department of Transportation regarding the movement of nuclear fuel, 183 and (3) the Department of Energy (DoE) regarding the federal government taking title to all spent domestic high-level radioactive waste. 184 No similar multi-level, multi-federal-agency statutory regulation affects transmission electric power involved in the *Transource* case.

The transmission plaintiff in *Transource* argued that there is conflict preemption wherever state and/or local government can make a decision on transmission siting that conflicts with federal "plans," notwithstanding that such federal plans have never been found to also impliedly permit siting for future transmission.¹⁸⁵ The *Transource* Federal District Court endorsed this extremely broad implied conflict preemption, now implied in a federal transmission plan, which has never previously constituted or enabled siting of transmission.¹⁸⁶ The Court defined this by quoting a Supreme Court case regarding energy conservation:

Under Supreme Court precedent, conflict preemption arises where (1) "state and federal laws 'directly conflict," *PLIVA, Inc. v. Mensing*, 564 U.S. 604, 617 (2011), or where (2) "the state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *Oneok, Inc. v. Learjet, Inc.*, 575 U.S. 373, 377 (2015) (internal quotations omitted). States cannot "regulate areas where FERC has properly exercised its jurisdiction" or create an "unavoidable conflict." *Oneok*, 575 U.S. at 386, 389 . . . Transource also submits that the PUC's decision is an obstacle to FERC's objective of creating transmission lines which reduce congestion, in turn reducing pricing

^{182. 461} U.S. 190 (1983).

^{183.} See 10 C.F.R. §§ 73.25-73.38 (2025).

^{184.} See Nuclear Energy Inst., Inc. v. EPA, 373 F.3d 1251, 1277 (D.C. Cir. 2004).

^{185.} See also Brief of Appellee at 25–30, Transource Pa., LLC v. DeFrank, (3d Cir. 2024) (No. 24–1045) [hereinafter Brief of Appellee].

^{186.} Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 289–94. (M.D. Pa. 2023).

disparities.¹⁸⁷

The *Transource* Court also stated Transource's assertion that "the D.C. Circuit has stated, '[e]nsuring the proper functioning of the interconnected grid spanning state lines... fits comfortably' within the FPA's 'grant of jurisdiction over 'the transmission of electric energy in interstate commerce." This may be inapposite: While FERC does have exclusive authority over the operational aspects (rates and terms) of existing transmission lines, it has no authority over the siting and land-use decisions regarding new lines which, for the last 90 years since the enactment of the Federal Power Act, are reserved to exclusive state and local authority.

The *Transource* Court then quoted several Supreme Court decisions that upheld the so-called "Filed Rate Doctrine" cited by the plaintiff to solidify that FERC sets transmission and wholesale "rates" for the operation of the existing transmission system: One is *Nantahala Power & Light Co. v. Thornburg*, ¹⁸⁹ another is *Mississippi Power & Light Co. v. Mississippi ex rel. Moore*. ¹⁹⁰

These two Supreme Court cases dealt only with FERC setting rates for wholesale power sales over existing lines and do not in any way address siting or permitting of new transmission infrastructure or lines. Federal law grants federal authority over the former, while reserving the latter jurisdiction over siting to the states. ¹⁹¹ In one sentence, the *Transource* Trial Court importantly acknowledged a lack of support that "[a]lthough Transource has provided a well-reasoned argument, no binding precedent is directly on point." ¹⁹² As its lynchpin, the *Transource* Trial Court, without precedents regarding transmission siting authority, concluded "[b]ecause the PUC's decision presents an obstacle to achieving federal objectives, it is conflict preempted and violates the Supremacy Clause." ¹⁹³

The Supreme Court has reenforced the presumption against preemption. ¹⁹⁴ The *Transource* Court referenced *Rice v. Santa Fe Elevator*

188. Id. at 285 (quoting S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41, 63 (D.C. Cir. 2014)).

^{187.} Id. at 284.

^{189.} Transource Pa. LLC, 705 F. Supp. 3d at 286; 476 U.S. 953, 966 (1986) ("Once FERC sets...a rate, a State may not conclude in setting retail rates that the FERC-approved wholesale rates are unreasonable. A State must rather give effect to Congress' desire to give FERC plenary authority over interstate wholesale rates, and to ensure that the States do not interfere with this authority.").

^{190. 487} U.S. 354, 371 (1988) (explaining that once a tariff has been filed with FERC and approved, either explicitly by FERC or by operation of law, it has the force of federal law).

^{191.} See 16 U.S.C. §§ 824-25.

^{192.} Transource Pa., LLC, 705 F. Supp. 3d at 287.

^{193.} Id. at 289.

^{194.} Bates v. Dow Agrosciences LLC, 544 U.S. 431, 449 (2005) (quoting Meditronic, Inc. v. Lohr, 518 U.S. 470, 485 (1996)) (describing how the Court has a "duty to accept the reading that disfavors

Corp¹⁹⁵ and Medtronic Inc. v. Lohr, ¹⁹⁶ holding that in areas of traditional state regulation, the assumption must be that a federal statute will not supplant state law unless Congress made such an intention clear and manifest. The Court, as well as all parties, "acknowledge[d] that the Project is not in a national interest electric transmission corridor, and FERC therefore has no authority to issue a construction permit." This would seem like it should end any debate about a FERC or ISO plan impliedly containing the equivalent of construction permits.

A construction permit is required before one can utilize land that one does not own. If "FERC therefore has no authority to issue a construction permit," and only state and local government may issue such permissions, that rationale does not exist in the *Transource* record. FERC and its delegate ISOs, such as PJM, cannot extend their statutory authority unilaterally from an administrative order, notwithstanding the Federal Power Act. 199

The *Transource* Court recharacterized "the issue relat[ing] to whether the PUC decision was an obstacle to achieving federal objectives."²⁰⁰ That is not what the statute explicitly provides, nor what Supreme Court decisions have held since the statute's enactment. Other statutes, such as the National Gas Act, preempt interstate natural gas pipeline infrastructure siting decisions to be within federal rather than state authority.²⁰¹ The Federal Power Act expressly did not do this and courts interpreting the Federal Power

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pre-emption. '[B]ecause the States are independent sovereigns in our federal system, we have long presumed that Congress does not cavalierly pre-empt state-law causes of action'").

^{195.} See generally Rice v. Santa Fe Elevator Corp., 331 U.S. 218 (1947).

^{196.} See generally Medtronic, 518 U.S. 470 (abrogated by Thornton v. Tyson Foods, Inc., 28 F.4th 1016, 1023 (10th Cir. 2022)); see Wyeth v. Levine, 555 U.S. 555 (2009).

^{197.} See Transource Pa., LLC, 705 F. Supp. 3d at 290. Except for that limited federal backstop siting authority under 16 U.S.C. § 824p, the states have exclusive authority over siting, and that includes whether a transmission line is needed. See W. & S. Life Ins. Co. v. State Bd. of Equalization of Cal., 451 U.S. 648, 652–53 (1981); Tampa Elec. Co. v. Garcia, 767 So.2d 428, 436 (Fla. 2000).

^{198.} Transource Pa., LLC, 705 F. Supp. 3d at 273-74.

^{199.} Id. at 290. The District Court found that:

While Defendants concede that FERC had jurisdiction over transmission planning, they argue that the PUC's decision constituted an exercise of its siting authority, a power which Congress has left exclusively to the states. (*Id.* at 9.) Invoking a FERC order, they assert that "[i]t is well-settled that [FERC] does not have authority over the siting and construction of electric transmission facilities." *Id.* (quoting PacifiCorp, 72 FERC ¶ 61,087, 61,488 (1995)). Instead, "[a]ll such matters should be resolved at the state and local level." PacifiCorp, 72 FERC at 61,488. Piedmont Env't. Council v. FERC, 558 F.3d 304, 310 (4th Cir. 2009) (stating that "states have traditionally assumed all jurisdiction to approve or deny permits for the siting and construction of electric transmission facilities."

Id. at 290; see Ashira Pelman Ostrow, *Process Preemption in Federal Siting Regimes*, 48 HARV. J. LEGIS. 289, 293–96 (2011). Federal frameworks often require balancing national priorities with traditional state and local controls over construction permitting and land use. *Id.*

^{200.} See Transource Pa., LLC, 705 F. Supp. 3d at 289.

^{201. 15} U.S.C. §§ 717–717w.

Act have not found an implied federal preemption.²⁰² Moreover, in 2025, while the *Transource* decision was pending, the Sixth Circuit held that a longstanding state law controlling whether in-state utilities transfer control of their transmission facilities to a regional transmission organization (RTO or ISO) is a matter of state jurisdiction—not preempted by the Federal Power Act.²⁰³ Immediately thereafter, somewhat at odds with the federal position in *Transource*, FERC itself cited this decision in a brief it filed in the Seventh Circuit.²⁰⁴

B. Violating the Dormant Commerce Clause?

1. The *Transource* Finding

In this *Transource* controversy, a Commerce Clause violation by the Pennsylvania PUC also was alleged by the transmission developer seeking to construct a new interstate transmission line through the state to serve Maryland and other states with imported power. Transource argued that "congestion represents a form of rate discrimination." The Court concluded that the PUC's decision violated the Dormant Commerce Clause because it protects Pennsylvania electric ratepayers from higher transmission rates when their less expensive in-state electric power would not traverse their state over these new transmission lines to serve other states to the east. With this new transmission power export line, Pennsylvania ratepayers would need to pay for more expensive electric power dispatched to fill in this exported gap created in Pennsylvania supply.

The *Transource* Federal Trial Court quoted certain Supreme Court cases distinguishable from key legal and factual elements of the Pennsylvania case at hand:

^{202.} Id.

^{203.} Dayton Power & Light Co. v. FERC, 126 F.4th 1107, 1129 (6th Cir. 2025).

^{204.} Brief for the FERC as Amicus Curiae at 14–15, LSP Transmission Holdings II, LLC v. Huston, 131 F.4th 566 (2025) (Nos. 24-3248 and 24-3249), 2025 WL 348281.

^{205.} See supra Part II.B.

^{206.} See Transource Pa., LLC, v. DeFrank, 705 F. Supp. 3d 266, 275 (M.D. Pa. 2023).

^{207.} Id. at 294–96.

^{208.} See How PJM Schedules Generation to Meet Demand, PJM (2024), https://learn.pjm.com/three-priorities/keeping-the-lights-on/how-pjm-schedules-generation-to-meet-demand (last visited Nov. 20, 2025) ("PJM schedules the lowest-cost generation to be available to meet the forecasted electricity usage for the next day plus a reserve amount (electricity supplies that currently are not being used but can be quickly available in the case of unexpected loss of generation)."); see also REGIONAL TRANSMISSION EXPANSION PLANNING, supra note 134, at 49 ("PJM system operators schedule and dispatch the lowest-cost power resources to generate electricity, regardless of which transmission zone or state it comes from.").

[W]here a state regulation is 'motivated by simple economic protectionalism,' it will be 'subject to a virtually per se rule of invalidity, which can only be overcome by a showing that the State has no other means to advance a legitimate local purpose.'²⁰⁹

While *United Haulers* found that there was economic protection, nonetheless, it upheld the regulation under the Dormant Commerce Clause. *United Haulers* is a case restricting the geographic movement of ordinary trash.²¹⁰ Trash enjoys a different legal status than electric power. Trash and solid waste are not significantly regulated by law;²¹¹ electric power is the most regulated item in the U.S. economy.²¹²

Legal analysis regarding electric power must start with the Federal Power Act. Precedent traditionally allocates to states legal authority and complete discretion under state law regarding the siting of, and land-use approvals for, transmission infrastructure. The *Transource* Court cited and relied on another Supreme Court case that is not analogous to electric power regulation: "This heightened scrutiny will apply where a state acts with 'discriminatory purpose,' or the regulation 'discriminates against interstate commerce 'either on its face or in practical effect." "214

Bacchus involved a liquor wholesaler who challenged certain locally produced alcohol products exempt from a Hawaii alcohol tax.²¹⁵ Factually, *Bacchus* concerned a movable tangible good—alcoholic spirits—which is fundamentally different than electricity, which in many states is considered legally not a good, but rather a service.²¹⁶ Electric power is a totally unique thing among U.S. technologies.²¹⁷

The *Transource* District Court advanced to its conclusion based on economic factors, "[q]uite simply, the PUC denied the Project because the PUC wished to maintain low prices for Pennsylvania customers that benefit from congestion." The Federal Power Act provides states discretion regarding what economic factors they may weigh in deciding whether to

211. See ENVIRONMENTAL LAW, supra note 127, at 369 (noting that solid waste is not significantly regulated by the Resource Conservation and Recovery Act).

^{209.} Transource Pa., LLC, 705 F. Supp. 3d at 294 (quoting United Haulers Ass'n v. Oneida-Herkimer Solid Waste Mgmt. Auth., 550 U.S. 330, 338–39 (2007)).

^{210.} Id.

^{212.} POWERING THE FUTURE, *supra* note 66, at 5.

^{213.} See LAW OF INDEPENDENT POWER supra note 147, at § 5:10.

^{214.} See Transource Pa., LLC, 705 F. Supp. 3d at 294 (quoting Green Spring Dairies, Inc. v. Pa. Milk Mktg. Bd., 298 F.3d 201, 210 (3d. Cir. 2002)).

^{215.} Bacchus Imports, Ltd. v. Dias, 468 U.S. 263, 270 (1984).

^{216.} Steven Ferrey, Unresolved Judicial Conflict and Critical Infrastructure, 3 TEXAS A&M L. REV. 581, 598 (2016).

^{217.} POWERING THE FUTURE, *supra* note 66, at 12–15.

^{218.} Transource Pa., LLC, 705 F. Supp. 3d at 294.

authorize the siting of additional transmission infrastructure.²¹⁹ The *Transource* Federal District Court also relied on another Supreme Court case highlighted in the plaintiff's brief:

Transource likens the PUC's decision to New England Power, in which the Supreme Court held that the 'order of the New Hampshire Commission, prohibiting New England Power from selling its hydroelectric energy outside the State of New Hampshire, is precisely the sort of protectionist regulation that the Commerce Clause declares off-limits to the states.' In that case, the utility commission issued its order to benefit citizens of New Hampshire to the detriment of those in neighboring states who could not have access to the low-cost power.²²⁰

In the law governing the electric power sector, there is a fundamental legal difference between operation of existing transmission lines and siting or construction of new transmission lines.²²¹ In *New England Power Co. v. New Hampshire*, the Supreme Court overturned an order of the New Hampshire PUC restricting privately owned renewable electric power generated in New Hampshire to continue as it had in the past from passing over existing transmission lines through the state to Massachusetts and Connecticut customers of the same parent utility. This utility, the New England Electric System and its sister company New England Power Company,²²² owned the generation source in New Hampshire and served customers in all three states simultaneously.²²³ This was found to violate the Dormant Commerce Clause.²²⁴ The Supreme Court held:

[We] consistently have held that the Commerce Clause of the Constitution . . . precludes a state from mandating that its residents be given a preferred right of access, over out-of-state consumers, to natural resources located within its borders or to the products derived therefrom[A] State is without power to prevent privately owned articles of trade from being shipped and sold in interstate commerce on the ground that they are required to satisfy local demands or

^{219.} See Federal Power Act, Pub. L. No. 66-280, ch. 285, \S 9(h), 41 Stat. 1063, 1070 (1920) (codified as amended at 16 U.S.C. \S 791–828).

^{220.} *Transource Pa., LLC*, 705 F. Supp. 3d at 295–96 (quoting New England Power Co. v. New Hampshire, 455 U.S. 331, 339 (1982)).

^{221.} See 15 U.S.C. §§ 717-717w.

^{222.} New England Power Co., 455 U.S at 344.

^{223.} Id. at 333.

^{224.} Id .at 339; see U.S. Const. art. I, § 8, cl. 3.

because they are needed by the people of the State.²²⁵

This New Hampshire PUC's change in the terms and resultant pricing of wholesale power sales made over existing transmission lines is within federal, not state, jurisdiction. These facts are not present in, and distinct from, the *Transource* matter. Notwithstanding this, the *Transource* Court dismissed Pennsylvania's distinctions about the *New England* case:

[D]efendants argue this is distinct from other cases which Transource cites, like *New England Power Co. v. New Hampshire*, because that case did not relate to the constitutionality of a state regulation preventing the construction of a utility facility on public land.²²⁶

However, these are important distinctions vis-à-vis *New England*: First, New Hampshire's PUC blocked an existing generation project from transmitting a utility company's power interstate using already-existing transmission lines. Second, FERC has exclusive federal preemptive authority over interstate wholesale power sales and all interstate power sales and terms. Third, there was no issue of the state siting any new transmission lines or infrastructure, which had that been an issue in *New Hampshire*, as it is in *Transource*, are entirely within state authority.

Each of these facts makes the issue in *New England* totally within federal jurisdiction, preempted, and distinct from the issue in *Transource*. *Transource* had nothing to do with setting the pricing terms for operation of any existing transmission infrastructure; it involved which levels of government have authority over land-use and siting permits necessary for new transmission infrastructure. As noted, FERC holds exclusive authority over the financial operation of existing transmission infrastructure and its terms, but not over new siting of transmission infrastructure.²²⁷

Not focusing on the jurisdictional issue, considering whether the end justifies the means, the *Transource* Court focused instead on whether new infrastructure, that the federal government has no traditional jurisdiction to site or permit, would improve the transmission system:

Importantly, the very nature of the Project is to improve the flow of wholesale electricity across state lines to places that currently have less access and therefore higher prices. The Project's sole purpose is to better facilitate commerce across

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^{225.} Id. (citations omitted) (quoting Philadelphia v. New Jersey, 437 U.S. 617, 627 (1978)).

^{226.} Transource Pa., LLC, v. DeFrank, 705 F. Supp. 3d 266, 295 (M.D. Pa 2023).

^{227.} See LAW OF INDEPENDENT POWER supra note 147.

regional and state boundaries. And the PUC's opposition to the Project is rooted in economic protectionism in the form of maintaining the status quo imbalance of access to low-priced electricity.²²⁸

There is nothing in federal law that states that a state must site and permit additional transmission lines that will cause its most valuable or economically-priced power to exit the state. Even what the District Court characterized as a federally planned "sole purpose" is legally not relevant if such a purpose is *ultra vires* and not within the authority of FERC or the PJM ISO non-profit member-controlled corporation pursuant to the Federal Power Act.²²⁹ The Constitution and federal law have been interpreted expressly to reserve and leave all traditional transmission infrastructure siting authority to the states pursuant to the Tenth Amendment of the Constitution.²³⁰

Most recently, in *National Pork Producers Council v. Ross*,²³¹ the Supreme Court rejected arguments that the Dormant Commerce Clause includes an "'almost per se' rule against laws that have the 'practical effect' of 'controlling' extraterritorial commerce."²³²

In the appeal of the *Transource* matter, there is no change imposed on any other states in PJM (such as Maryland or Delaware), as in *Pork Producers*.²³³ This decision can support Pennsylvania's position in the *Transource* matter.

2. Dormant Commerce Clause Circuit Court Jurisprudence

The California Low Carbon Fuel Standard (LCFS) was challenged as violating the Dormant Commerce Clause of the Constitution; treating the required agricultural ethanol gasoline additive differently and discriminatorily depending on from which state it originated and the distance it travelled to California filling stations.²³⁴ Plaintiffs alleged that the California Air Resources Board (CARB) rule implicitly discriminated against renewable fuels produced outside California that were in interstate commerce and eventually were sold at California gasoline stations.²³⁵

230. *Id.* at 283.

^{228.} Transource Pa., LLC, 705 F. Supp. 3d at 296.

^{229.} Id.

^{231. 598} U.S. 356 (2023).

^{232.} See Trial Court Appellee Brief, supra note 79, at 51.

^{233.} Id.

^{234.} See Rocky Mountain Farmers Union v. Goldstene, 843 F. Supp. 2d. 1071, 1087 (E.D. Cal. 2011); Rocky Mountain Farmers Union v. Corey, 730 F.3d 1070 (9th Cir. 2013); see also Steven Ferrey, Carbonite Legal Conflict in California, 5 SAN DIEGO J. CLIMATE & ENERGY L. 95, 112 (2014).

^{235.} See Rocky Mountain Farmers Union, 843 F. Supp. 2d. at 1071.

Specifically, the LCFS bases its credit calculations on the distance of shipment of ethanol gas additive fuels to California and assumes associated carbon emissions.²³⁶ These emissions include fossil fuels used to produce electricity in the state where the solid agricultural produce is processed to produce liquid ethanol.²³⁷

Plaintiffs argued that CARB violated the Dormant Commerce Clause by assigning a higher carbon intensity to fuel from outside California than the chemically identical fuel from inside the state.²³⁸ After the Federal District Court found a Dormant Commerce Clause violation,²³⁹ the Ninth Circuit reversed and applied the balancing test from *Pike v. Bruce Church, Inc.*²⁴⁰ This is the same test that the *Transource* Trial Court said it was applying in the case now at issue.²⁴¹

Involving interstate transmission of electric energy, two circuit courts found no Dormant Commerce Clause violation when two states originally—now increased to five states with subsidies—²⁴²discriminated in favor of protecting specific electric generation sited in their states. Challengers, who generated electric power in adjacent states, complained that this discriminated against the electric power generated outside that state and transmitted over interstate transmission infrastructure into the adjacent discriminating states: "Programs in Illinois, New York, New Jersey, and Ohio show ZEC prices ranging from \$10.00 per megawatt-hour (MWh) to \$17.50/MWh. Connecticut's program allows two [only in-state] generating units . . . to participate in an auction for carbon-free electricity."²⁴³

Illinois and New York chose to subsidize only their in-state power utilizing a subsidy called Zero Emission Credits (ZECs).²⁴⁴ The Illinois program was challenged on the grounds that the state had regulated in favor of in-state industries and consumers. The program required utilities to buy ZECs, with the state only granting the sale of ZECs to the two nuclear power

^{236.} Id. at 1087.

^{237.} Id. at 1088.

^{238.} Id.

^{239.} *Id.* at 1081–82. CARB attributed the difference in carbon intensity values to multiple scientific factors in addition to geographic location factors (emissions related to shipping or transportation of fuel). The court relied upon a table of Carbon Intensity values generated by CARB.

^{240.} Pike v. Bruce Church, Inc., 397 U.S. 137 (1970).

^{241.} See Rocky Mountain Farmers Union, 730 F.3d at 1078; see also Trial Court Appellee Brief, supra note 79, at 51.

^{242.} Mark Morey, Five States Have Implemented Programs to Assist Nuclear Power Plants, U.S. DEP'T OF ENERGY: ENERGY INFO. ADMIN. (Oct. 7, 2019), https://www.eia.gov/todayinenergy/detail.php?id=41534#:~:text=Programs%20in%20Illinois%2C%20 New%20York,MWh)%20to%20%2417.50%2FMWh.&text=Connecticut%27s%20program%2C%20wh ich%20is%20legislated,auction%20for%20carbon-free%20electricity.

^{243.} Id.

^{244.} Id.

generation facilities located within its own borders, and not out-of-state nuclear energy facilities whose electric output was sold to Illinois consumers. The Seventh Circuit found that the Illinois ZEC program does not "overtly" or expressly single out or discriminate against out-of-state power under the Dormant Commerce Clause, and was permissible under U.S. law. 246

The New York complaint proceeded similarly. Out-of-state power plant owners, who sold their power in interstate wholesale markets, unsuccessfully alleged that New York discriminated against out-of-state commerce by selectively granting its ZECs only to its in-state nuclear power plants.²⁴⁷ In both of these ZEC cases, certiorari was denied by the Supreme Court, making these two decisions the final word on this matter.²⁴⁸

These Seventh Circuit and Second Circuit ZEC opinions involving interstate electricity transmission and state discretion to protect in-state electricity consumers are more analogous to the present *Transource* legal issue than *Bacchus*. Regarding new permanent siting of electric transmission infrastructure, the Federal Power Act, several FERC orders, and relevant caselaw have always reserved to state discretion new siting use of their land. The *Transource* decision diverges from these precedents.

3. National Preemptive Corridors Precedent

In the last two decades since enactment of the Energy Policy Act of 2005 (EPAct 2005), prior to 2024 only two NIETCs were designated by DoE to benefit transmission-congested areas, both of which were immediately challenged and judicially overturned and vacated by different federal circuit courts of appeals.²⁴⁹ The Fourth Circuit in 2009 blocked FERC from acting to "backstop" and granting a federal permit for siting new electric transmission infrastructure under Section 216 of the Federal Power Act.²⁵⁰ This line planned to carry additional power to New York and other congested eastern states through Pennsylvania, Virginia, and West Virginia when those pass-through states had denied a permit within one year, pursuant to their conventional state siting authority.²⁵¹ The Court expressed concern that FERC's preemptive interpretation would eviscerate state energy regulatory

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^{245.} Old Mill Creek v. Star, 2017 WL 3008289, at *7 (N.D. Ill. 2017).

^{246.} Elec. Power Supply Ass'n v. Star, 904 F.3d 518, 525 (7th Cir. 2018).

^{247.} See Coal. for Competitive Elec. v. Zibelman, 906 F.3d 41, 58 (2d Cir. 2018).

^{248.} See Order List, 587 U.S 3 (Apr. 15, 2019), (certiorari denied in Elec. Power Supply Ass'n. v. Star, 18-868; Elec. Power Supply Ass'n. v. Rhodes 18-879).

²⁴⁹ Piedmont Env't Council v. FERC, 558 F.3d 304, 309–10 (4th Cir. 2009); Cal. Wilderness Coal. v. U.S. Dep't of Energy, 631 F.3d 1072, 1106 (9th Cir. 2011).

²⁵⁰ Piedmont, 558 F.3d at 309-10.

^{251.} Id. at 313.

authority regarding electric transmission infrastructure to "lose jurisdiction unless they approve every permit"²⁵²

The Fourth Circuit stated that had Congress intended for FERC to blanket-preempt state jurisdiction over transmission siting, it would have said so explicitly in the Federal Power Act.²⁵³ The language of EPAct 2005 still followed state permitting determinations as long as the state took any action on an application within a one-year period, even if a state denied a permit.²⁵⁴ The Federal Power Act limits federal authority to only Congress's specific grants: The Fourth Circuit in *Piedmont* held that a state retains its "legitimate use of its traditional powers" and can deny a transmission application.²⁵⁵ Subsequently, in 2011, with regard to this same Section 216 amendment to the Federal Power Act under EPAct 2005, the Ninth Circuit ruled that the U.S. DoE "failed to properly consult with affected States in conducting the Congestion Study".²⁵⁶ The study analyzed high priority transmission corridors in mid-Atlantic and southwestern states, and failed to consider the environmental effects of designating NIETCs required by the National Environmental Policy Act.²⁵⁷

New Hampshire unilaterally blocked needed new transmission infrastructure to carry additional renewable power from Canada to Massachusetts and Connecticut.²⁵⁸ Massachusetts selected competitively Northern Pass Transmission to supply 1,090 MW of zero-carbon hydro power produced in Quebec, Canada, to be transmitted through a new 192-mile high voltage direct current (HVDC) transmission line.²⁵⁹ The HVDC portion of the transmission project would be located entirely in New Hampshire; the costs of the transmission facilities were to be paid for by Massachusetts consumers.²⁶⁰ A permit for the HVDC portion of the Northern Pass project passing through New Hampshire was rejected by the state energy regulatory agency in New Hampshire because of its adverse impact to natural

254. Id. at 315.

²⁵² Id. at 314.

^{253.} Id.

^{255.} *Id.* at 314–15.

^{256.} Cal. Wilderness Coal. v. U.S. Dep't of Energy, 631 F.3d 1072, 1079 (9th Cir. 2011).

^{257.} Id.; see 16 U.S.C. § 824p(b)(4).

²⁵⁸ See William Pentland, New Hampshire Blocks Major Transmission Project, FORBES (Feb. 4, 2018), https://www.forbes.com/sites/williampentland/2018/02/04/new-hampshire-blocks-major-power-transmission-project/?sh=3e432ea07fdb.

^{259.} Id

^{260.} See Paul L. Joskow, Facilitating Transmission Expansion to Support Efficient Decarbonization of the Electricity Sector 20–21 (MIT Ctr. for Energy & Env't Pol'y Rsch., 2021) (noting that the "HVDC portion of the project was to be located entirely in New Hampshire, though none of the clean energy supplied by Hydro-Quebec would be credited to utilities or consumers in New Hampshire since the counterparties to the contract with Hydro-Quebec and the costs of the transmission facilities were to be credited to and paid for by Massachusetts consumers").

scenery.²⁶¹ When challenged, this decision was upheld by the New Hampshire Supreme Court in 2019, and the project was abandoned.²⁶²

The Biden Administration attempted federal preemption again: The 2021 **Improvement** Infrastructure and Jobs Act (IIJA) Section 216(b)(1)(C) of the Federal Power Act to grant FERC permitting authority when a DoE high-impact transmission corridor plan is not approved by a state energy regulatory authority within one year of a proposal. ²⁶³ The IIJA also amended Section 216(e), which grants a permit holder for a line in a NIETC area the right via FERC to acquire the necessary right-of-way by eminent domain. The permit holder must have made good faith efforts to engage with landowners and other stakeholders early in the applicable permitting process, and been denied permission to site a transmission line only on certain NIETC land.264

In 2023, FERC started the process to grant new transmission authority in NIETCs pursuant to the revised Section 216 of the Federal Power Act. 265 Necessary pre-permit National Environmental Policy Act (NEPA) compliance, as well as possible similar state law environmental impact review compliance, prior to any new transmission construction is still to be determined. Although this new authority had not been legally tested in the courts at the time the Biden Administration was replaced by the Trump Administration, a critical statutory barrier in any state is apparent. As amended, Section 216 only provides eminent domain for the federal government or its delegates over privately-owned land. 266

There is no eminent domain power granted over state-owned lands.²⁶⁷

^{261.} See Justin Gundlach, Transmission Siting Woes are Slowing the Clean Energy Transition in New England, 53 ABA ENV'T, ENERGY, & RES. SECTION TRENDS, July/Aug. 2022, at 6 (explaining how Northern Pass project planned to traverse New Hampshire, but New Hampshire's Site Evaluation Committee blocked the proposal, arguing that the adverse impact to natural scenery and thus tourism made the line unacceptable); see also Iulia Gheorghiu, New Hampshire Supreme Court Strikes Down Appeal for Northern Pass Transmission Permit, UTILITY DIVE (July 22, 2019), https://www.utilitydive.com/news/new-hampshire-supreme-court-strikes-down-appeal-for-northern-pass-transmiss/559221/ (reporting that the Court unanimously voted to uphold the rejection of Eversource's proposed 192-mile transmission line, Northern Pass).

^{262.} In re Appeal of N. Pass Transmission, LLC, 214 A.3d 590, 614 (N.H. 2019).

^{263.} *Id.*; 42 U.S.C. § 4332(2)(C). For FERC to approve the siting of the transmission facilities, the state: (i) has not made a determination on an application by one year after the later of the date on which the application was filed or the date on which the relevant National Corridor was designated; (ii) has conditioned its approval such that the proposed project will not significantly reduce transmission capacity constraints or congestion in interstate commerce or is not economically feasible; or (iii) has denied an application. *Id.*

^{264. 16} U.S.C.§ 824p(e)(1).

^{265.} Applications for Permits to Site Interstate Electric Transmission Facilities, 88 Fed. Reg. 2770 (proposed Jan. 17, 2023) (codified at 18 C.F.R. pt. 50, 380).

^{266.} See Inflation Reduction Act, 16 U.S.C. § 824p(e)(1).

^{267.} Id.

Under the Tenth Amendment, states have the power to deny pass-through transmission lines over state-owned land. State-owned land is in critical locations—under major federal or state highways which otherwise could serve as ideal interstate transmission corridors.²⁶⁸

The land under river bottoms, streams, and creeks form the boundaries of most states: 44 of the continental 48 states, including every state east of the Mississippi River, have at least part of their boundaries defined by rivers. The "equal footing doctrine," upheld by the Supreme Court in the 21st century, as well as over the prior 175 years, provides that each state owns the bottoms of all navigable waters within its territory. Given this gap

268. See U.S. GOV'T ACCOUNTABILITY OFF., GAO-08-347R, TRANSMISSION LINES: ISSUES ASSOCIATED WITH HIGH-VOLTAGE DIRECT-CURRENT TRANSMISSION LINES ALONG TRANSPORTATION RIGHTS OF WAY 3 (2008) (discussing various state and federal prohibitions on co-locating transmission lines along highways); see also 23 C.F.R. § 710 (2025).

269. MICHAEL WIGMORE ET AL., LAW 360, FEDS MAY NEED POWER TO TAKE STATE LANDS FOR NEW GRID 3 (2021) (stating that "[a]ll but four of the lower 48 states, including every state east of the Mississippi River, have at least part of their boundaries defined by rivers").

270. See PPL Mont. LLC v. Montana, 565 U.S. 576, 604 (2012). The Court ruled that while Montana owns and may charge for use of riverbeds across the state, that was based upon an infirm legal understanding of this Court's rules of navigability for title under the equal-footing doctrine:

As the Court said in *Brewer–Elliott*: "It is not for a State by courts or legislature, in dealing with the general subject of beds of streams, to adopt a retroactive rule for determining navigability which... would enlarge what actually passed to the State, at the time of her admission, under the constitutional rule of equality here invoked."

Id. at 604-05 (quoting Brewer-Elliott Oil & Gas Co. v. United States, 260 U.S. 77, 88 (1922)).

271. See Pollard's Lessee v. Hagan, 44 U.S. (3 How.) 212, 230 (1845) (affirming that "[t]he shores of navigable waters, and the soils under them, were not granted by the Constitution to the United States, but were reserved to the states respectively... [and] [t]he new States have the same rights, sovereignty, and jurisdiction over this subject as the original states"); see also U.S. v. Riverside Bayview Homes, Inc., 474 U.S. 121, 129, 139 (1985) (holding that the Corps definition of waters as including wetlands adjacent to navigable waters, even if not inundated or frequently flooded by the navigable water, was reasonable under the statutory authority); U.S. v. Robison, 505 F.3d 1208, 1222 (11th Cir. 2007) (explaining that under Justice Kennedy's concurrence in Rapanos, "a water can be considered 'navigable' under the CWA only if it possesses a 'significant nexus' to waters that 'are or were navigable in fact or that could reasonably be so made"); North Carolina ex rel. N.C. Dep't of Admin. v. Alcoa Power Generating, Inc., 853 F.3d 140, 147 (4th Cir. 2017). The Fourth Circuit noted that the "Supreme Court long ago recognized that the title to a State's navigable waters and their riverbeds vested in the State as an aspect of sovereignty obtained when separating from the British Crown and becoming a State":

[W]hen the revolution took place, the people of each state became themselves sovereign' and that the rights that flowed from that sovereignty upon the subsequent ratification of the Constitution meant that States "hold the absolute right to all their navigable waters, and the soils under them, for their own common use, subject only to the rights since surrendered by the constitution [sic] to the general government."

Id. (quoting Martin v. Waddell's Lessee, 41 U.S. (16 Pet.) 367, 410 (1842)); Furie Petroleum, L.L.C. v. Swepi, LP, 285 So. 3d 91, 96 (La. App. 2d Cir. 2019) ("[A]cknowledging the absolute supremacy of the United States of America over the navigation on the navigable waters within the borders of the state, it is hereby declared that the ownership of the water itself and the beds thereof in the said navigable waters is vested in the state and that the state has the right to enter into possession of these waters when not interfering with the control of navigation exercised thereon by the United States of America.").

in the IIJA, any uncooperative state can still deny needed state permission for any FERC-instigated federal siting of transmission lines over or under state legal interests in land.

The next Part of this Article analyzes the key constitutional positions advanced by all sides in *Transource*, which will define the new separation of powers regarding power.

IV. ON THE RECORD: TRANSOURCE APPEAL

A. Transource and PJM Legal Positions

Applicant Transource argues that the Pennsylvania PUC rejection of the transmission project directly conflicts with the Federal Power Act, which grants FERC exclusive authority over regional transmission planning and wholesale electricity markets.²⁷² Proposed to mitigate grid congestion between Pennsylvania and Maryland, this line was developed as part of PJM's FERC-approved Regional Transmission Expansion Plan (RTEP), which employs a cost-benefit analysis to identify necessary upgrades to the grid.²⁷³ By denying the project, Transource asserts that Pennsylvania's rejection conflicts with the Supremacy Clause, as it undermines federally established methodologies for addressing regional grid reliability and congestion.²⁷⁴

Central to Transource's argument is the Filed Rate Doctrine, under which FERC-approved tariffs have the force of law and preempt state actions that interfere with federal objectives.²⁷⁵ FERC conceded that no precedent exist creating federal transmission siting authority without state approval, and no precedent is cited where a FERC or ISO tariff ever has conferred land-use approval absent state or local permits.²⁷⁶ Transource argues that Pennsylvania's decision undermines the uniformity required in regional planning and imposes local considerations that conflict with the broader

274. See id. at 31–32. Case precedents such as *Piedmont Environmental Council v. FERC*, which held that FERC's jurisdiction does not extend to overruling state decisions on siting applications outside designated National Interest Electric Transmission (NIETCs), are interpreted by Transource as supporting their position that state objections are limited to narrowly defined contexts.

^{272.} See Brief of Appellee, supra note 185, at 26–29.

^{273.} Id. at 14, 29-30.

^{275.} See PJM Brief, supra note 126, at 5; Transource Pa. LLC v. DeFrank (3d Cir. 2024) (No. 24-1045). Transource underscores that the Filed Rate Doctrine is not limited to rate-setting but encompasses all mechanisms essential to implementing FERC's regulatory goals. *Id.* By opposing the project's development, the Pennsylvania PUC's actions effectively undermine the federally approved rate structure by preventing cost recovery tied to the project's implementation. *Id.* Transource argues that this violates the Filed Rate Doctrine by creating a de facto barrier to FERC's jurisdictional authority. *Id.*

^{276.} Transource Pa., LLC, v. DeFrank, 705 F. Supp. 3d 266, 287. (M.D. Pa. 2023).

benefits identified in PJM's planning process.²⁷⁷ However, due to a significant policy shift post-2022, this potentially invokes scrutiny under the Major Question Doctrine.

Transource relies on precedents such as *Mississippi Power & Light Co. v. Mississippi ex rel. Moore*,²⁷⁸ where the Supreme Court held that states could not contradict FERC-approved rates or policies, and *Hughes v. Talen Energy Marketing, LLC*,²⁷⁹ which invalidated state measures that disrupted FERC-regulated wholesale power markets.²⁸⁰ Transource further argues that the Supremacy Clause ensures that state laws and actions conflicting with federal authority are preempted, particularly in cases involving federally regulated energy markets.²⁸¹ Additionally, Transource asserts that FERC's cost-benefit analysis identified the project as necessary for addressing congestion costs and improving grid reliability, which the state PUC improperly dismissed by focusing solely on local ratepayer impacts.²⁸²

PJM, a FERC regulated non-profit member-controlled corporation, joined as amicus curiae, strongly supporting Transource's position that PJM's planning impliedly preempts any state decision, arguing that the Federal Power Act assigns FERC exclusive authority over transmission planning and the operation of wholesale electricity markets. PJM asserted that the state PUC's denial of the project conflicts with FERC-approved RTEP methodologies to mitigate congestion and maintain grid reliability. PJM leans heavily on the Supremacy Clause and related case law, that state energy commissions cannot override federal regulations or the decisions of federal agencies. PSS

PJM, while conceding that states retain authority over siting decisions, argued that the PUC's decision improperly substituted state-level considerations for federally established criteria. ²⁸⁶ PJM argues that states do not have the power to second-guess or veto the fundamental question of need for transmission projects designed to alleviate congestion in a regional

^{277.} See Transource Pa. LLC v. DeFrank (3d Cir. 2024) (No. 24-1045).

^{278. 487} U.S. 354, 377 (1988) (establishing FERC's authority over wholesale electricity rates).

^{279. 578} U.S. 150, 166 (2016) (portraying Supreme Court rejection of a state action that interfered with FERC's regulation of wholesale electricity prices).

^{280.} See PJM Brief, supra note 126, at 13-19.

^{281.} See id.

^{282.} See id.

^{283.} Id. at 4.

^{284.} See id at 14-17.

^{285.} See id at 13–19 (arguing that under the Supremacy Clause, states do not have authority to second-guess FERC's authority over transmission practices and rates—including FERC's implementation of that authority through tariffs that mandate regional transmission planning and specify the criteria to be used for evaluating whether a project is needed to relieve system congestion.); New York v. FERC, 535 U.S. 1, 19–20 (2002); PPL Energyplus LLC v. Solomon, 766 F.3d 241, 253 (3d Cir. 2014).

^{286.} See PJM Brief, supra note 126, at 13-19.

grid,²⁸⁷ or address regional planning or grid reliability needs.²⁸⁸ To reinforce this position, PJM relied on cases like *South Carolina Public Service Authority v. FERC*,²⁸⁹ which affirmed FERC's authority to regulate regional planning and ensure compliance with federal standards.²⁹⁰ Additionally, PJM defended its cost-benefit analysis to evaluate the economic and operational benefits of proposed transmission projects against Pennsylvania's consideration of other economic impacts, as a violation of federal law.²⁹¹

B. Pennsylvania's Overlooked State's Legal Position

The Pennsylvania Attorney General's opening brief on appeal emphasized that "States have traditionally assumed all jurisdiction" over transmission line siting, and that Congress "has consented" to such broad state authority, contrary to the Federal Trial Court decision. Pennsylvania asserted that "Congress has not disturbed the States' longstanding historical authority to approve or deny siting permits," and FERC's orders on transmission planning repeatedly acknowledge that states retain exclusively all permitting authority and discretion. Pennsylvania notes that FERC concedes its own official order:

[I]t is well-settled that [FERC] does not have authority over the siting and construction of electric transmission facilities. (Id. (quoting *PacifiCorp*, 72 FERC ¶ 61,087, 61,488 (1995)).) Instead, "[a]ll such matters should be resolved at the state and local level." *PacifiCorp*, 72 FERC at 61,488. Courts have found that "states have traditionally assumed all jurisdiction to approve or deny permits for the siting and construction of electric transmission facilities." *Piedmont Envtl. Council v. FERC*, 558 F.3d 304, 310 (4th Cir. 2009).²⁹⁴

^{287.} *Id* at 16 (citing Hughes v. Talen Energy Mkgt., 578 U.S. 150, 163 (2016)) (noting that the PAPUC impermissibly "invade[d] FERC's regulatory turf"); *see* Miss. Power & Light Co. v. Mississippi *ex rel*. Moore, 487 U.S. 354, 370–74 (1988); Nantahala Power and Light Co. v. Thornburg, 476 U.S. 953, 966–69 (1986).

^{288.} See PJM Brief, supra note 126, at 16 (citing Hughes, 578 U.S. at 165).

^{289.} S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41, 57–58 (D.C. Cir. 2014) (reinforcing that state commissions have authority over siting decisions and public need determinations). The Supreme Court denied certiorari in *South Carolina Public Service Authority v. FERC*, thereby the D.C. Circuit opinion is final law and remains as binding precedent within its jurisdiction, and persuasive authority elsewhere. *Id.* This denial reinforces the appellate court's affirmation of state commissions' authority over transmission line siting and public need determinations. *Id.*

^{290.} See PJM Brief, supra note 126, at 7.

^{291.} See id.

^{292.} See AG Brief, supra note 170, at 24-25.

^{293.} Id. at 31.

^{294.} See Transource Pa., LLC, v. DeFrank, 705 F. Supp. 3d 266, 290. (M.D. Pa. 2023).

The lower Court sidestepped this precedent, noting "[d]efendants have provided no authority to suggest that public utility commissions are meant to exercise parallel functions as FERC."²⁹⁵ There is no parallel authority; states have exclusive—rather than parallel or dual—transmission siting authority.²⁹⁶ FERC has planning authority, without any ability to site new transmission unless in a NIETC under the IIJA which does not include the line at issue in the *Transource* matter, as well as rate authority over transmission operation of existing transmission lines.²⁹⁷ The State notes that the federal PJM planning process does not provide the same level of public input, binding adjudicatory hearings, or cross-examination and discovery available under the Pennsylvania's PUC's procedure based on the evidence presented and of formal record.²⁹⁸ Transmission siting is exclusively within state jurisdiction under Supreme Court and federal court precedent, the Federal Power Act, and most importantly the Tenth Amendment of the Constitution.²⁹⁹

FERC itself acknowledged in its Order 1000, akin to the D.C. Circuit in *South Carolina Public Service Authority*, 300 that FERC does not have authority over siting, permitting, land-use determinations, or construction decisions for electric transmission lines through a particular state. The Court held that a state can exercise pursuant to its own laws whether a line is necessary or needed by the public, 301 conceding that this project would allow Pennsylvania's cheaper electricity to flow to Maryland, Virginia, and the District of Columbia, causing Pennsylvania consumers to bear a significant cost increase. 302 Congress declared, as a matter of law, that federal regulation of transmission and sale was "to extend only to those matters which are not subject to regulation by the States." For the last 90 years since this statute was enacted, all states retained their traditional authority over the siting of

^{295.} Id. at 291.

^{296.} Id. at 290.

^{297.} See supra Part II.A.

^{298.} See Brief of Amicus Curiae Pennsylvania Office of Consumer Advocate et al. in Support of Appellants at 10, Transource Pa., LLC v. DeFrank, No. 24-104 (3d Cir. 2024) [hereinafter PAOCA Brief] ("PJM is not an adjudicatory body where trial-type procedures are envisioned, much less utilized, in its decision-making. Indeed, RTOs were never conceived for such a purpose; they are primarily engineering organizations. If PJM is the arbiter of need and, as the District Court suggests, PJM's decision is determinative of whether the line should be built (JA46), only PJM members will be able to challenge PJM's determination. This is not what Congress intended: in the context of need determinations, outside of the FERC's limited jurisdiction over NIETCs, the only place where due process occurs in the transmission line siting arena is in state-level siting proceedings.").

^{299.} Id.

^{300.} S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41, 57-58 (D.C. Cir. 2014).

^{301.} See Transource Pa., LLC, 705 F. Supp. 3d at 290; see also AG Brief, supra note 170, at 21.

^{302.} See Appellants' Reply Brief at 15, Transource Pa., LLC v. DeFrank (3d Cir. Aug. 14, 2024) (No. 24-1045) [hereinafter AG Reply Brief].

^{303. 16} U.S.C. § 824(a).

transmission lines.³⁰⁴ Nonetheless, the District Court held that the PUC's decision violated the *Pike* balancing test.³⁰⁵

Amici briefs submitted by the Pennsylvania Office of Consumer Advocate (PAOCA) emphasized the importance of preserving state authority over transmission siting. PAOCA highlights that FERC's transmission planning role does not extend to siting or land-use decisions, which remain a cornerstone of state jurisdiction under the Federal Power Act. PAOCA argued that any other interpretation would erode state sovereignty and disrupt the balance of authority intended by Congress's "carefully crafted division of roles that federal and state authorities have observed in authorizing the construction of interstate transmission lines."

Pennsylvania underlines that state siting processes provide critical protections for landowners and local communities, ensuring that decisions account for specific local impacts, such as economic costs and land-use considerations, protections absent in the regional planning process managed by PJM.³⁰⁹ The State argued PJM's regional planning lacks procedural safeguards, such as public involvement and rigorous evaluation of local impacts, which are fundamental to state siting processes.³¹⁰ They quote language from FERC Orders 1000 and 1000-A relied on by PJM, where FERC instead reinforces its own admission recognizing significant legal

^{304.} See Piedmont Env't Council v. FERC, 558 F.3d 304, 310 (4th Cir. 2009); PacifiCorp., 69 FERC ¶ 61,099, 61,382 (1994). Jim Rossi, The Trojan Horse of Electric Power Transmission Line Siting Authority, 39 ENV'T. L. 1015, 1019 (2009) ("Historically, state and local regulators have focused on determining the 'need' for a power line before giving siting approval....").

^{305.} See Transource Pa., LLC, 705 F. Supp. 3d at 297; see also AG Brief, supra note 170, at 49–55.

^{306.} AG Brief, *supra* note 170, at 31.

^{307.} See AG Brief, supra note 170; see also PAOCA Brief, supra note 298, at 5–9. "On the question on who approves siting and construction of transmission facilities" PAOCA quoted FERC's Order 1000, stating:

We acknowledge that there is longstanding state authority over certain matters that are relevant to transmission planning and expansion, such as matters relevant to siting, permitting, and construction. However, nothing in this Final Rule involves an exercise of siting, permitting, and construction authority. The transmission planning and cost allocation requirements of this Final Rule . . . are associated with the processes used to identify and evaluate transmission system needs and potential solutions to those needs. In establishing these reforms, [FERC] is simply requiring that certain processes be instituted. This in no way involves an exercise of authority over those specific substantive matters traditionally reserved to the states . . . it is important to recognize that Order No. 1000's transmission planning reforms are concerned with process; these reforms are not intended to dictate substantive outcomes, such as what transmission facilities will be built and where. We recognize that such decisions are normally made at the state level. *Id.* at 5–6. The PAOCA concludes that "[g]iven this background, to the extent the District Court's opinion implies that the transmission line siting should be the province of federal authorities, it must be rejected." *Id.* at 7.

^{308.} See PAOCA Brief, supra note 298, at 17; see also AG Reply Brief, supra note 302, at 25.

^{309.} See AG Brief, supra note 170, at 32-33.

^{310.} Id.

distinction between federal planning authority and state siting jurisdiction.³¹¹ Pennsylvania's rejection of the project is defended as a valid exercise of state authority, particularly given concerns over increased costs for Pennsylvania consumers and concerns about PJM's cost-benefit analysis.³¹²

Furthermore, Pennsylvania contends that granting federal preemption over state siting decisions, as sought by Transource and supported by PJM, would upset the balance of federal and state authority established under the Federal Power Act to ensure states' ability to safeguard local interests and manage their land use effectively. Pennsylvania cites *Piedmont Environmental Council v. FERC*; courts have consistently recognized the clear distinction between FERC's planning authority and states' exclusive control over siting decisions. 314

V. PENDING UNRESOLVED SUPREME COURT CONSTITUTIONAL CONFLICTS

A. Affirmed

In late 2025, the Third Circuit Court of Appeals unanimously affirmed the District Court decision in *Transource*. The Court neglected to decide as to whether there was a Dormant Commerce Clause violation. The opinion does not provide any authority for finding dual federal and state authority to site new transmission infrastructure, or for implied conflict preemption authority for federal siting or construction authority:

We agree that the task of approving construction in a particular place falls to state authorities. This is clear from the FPA [Federal Power Act]....FERC moreover has repeatedly reaffirmed that its regulations are not intended to intrude upon states' traditional siting authority. Even Transource agrees that "states retain authority over siting and construction." That is not the end of the inquiry, however. Implied conflict preemption occurs when states act in ways that impede the federal government from carrying out federal objectives, "even when [s]tates exercise their traditional authority."³¹⁶

If federal plans impliedly preempt state authority here—where such state authority is statutorily allocated exclusively to states—then any plan of the

312. See AG Reply Brief, supra note 302, at 21–23; see also PAOCA Brief, supra note 298, at 11–15; see generally AG Brief, supra note 170, at 44–49.

^{311.} Id. at 5-6

^{313.} *See* AG Reply Brief, *supra* note 302, at 7.

^{314.} See id. at 13; see also PAOCA Brief, supra note 298, at 8-9.

^{315.} See generally Transource Pa., LLC v. DeFrank, 156 F.4th 351 (3rd Cir. 2025).

^{316.} Id. at 378 (footnotes omitted) (quoting Brief of Appellee, supra note 185, at 15).

president or a federal agency might potentially preempt anything state or local government has jurisdiction over. *Transource* is no ordinary pedestrian dispute. It invokes and challenges interpretation of two primary Articles of the U.S. Constitution that establish and maintain separation of powers concerning the most complex engineered technology supporting the U.S. economy—the electric transmission grid. The interconnection of renewable power resources is related to mitigation of climate change.

Transource is the 21st century legal "canary in the coal mine," signaling and determining who will now control U.S. power over power, amid accelerating constitutional tension between federal planning and state authority controlling the nation's electric infrastructure. At stake is more than new transmission lines for particular regions; this case redraws the Supreme Court's immovable "bright line" and separation of powers. Transource and PJM initiated litigation, arguing that under the Supremacy Clause and the Filed Rate Doctrine, state actions that frustrate or obstruct any FERC-planned transmission projects anywhere, as a case of first-impression should be impliedly preempted. 318

PJM is tasked with functioning as a neutral regulator, embroiled as amici supporting Transource. In response, Pennsylvania countered that the Federal Power Act expressly states that it preserves and does not interfere with exclusive Tenth Amendment authority over siting all transmission infrastructure, which FERC admits in its various orders. Pennsylvania further asserts that Congress has never clearly granted FERC or PJM authority to unilaterally change this legal separation, violating the Major Questions Doctrine. Questions Doctrine.

This case constitutes an inflection point. Since federal regulation began in 1935, federal courts have never sanctioned any implied federal preemptive siting of transmission infrastructure when states do not grant permits for land use. This consistent lack of federal authority included the proposed but never state co-approved Palo Verde-Devers No. 2 line to serve California (opposed in Arizona), the Trans-Allegheny Line to serve the Mid-Atlantic Region (opposed in Pennsylvania, Virginia, and West Virginia), as well as opposition to lines by and through New Hampshire to serve adjacent New England states. ³²¹ Challenges from states and other interested stakeholders will continue, ³²² as the DoE proceeds designating 10 new proposed high-

^{317.} See Federal Power Act, Pub. L. No. 66-280, ch. 285, 41 Stat. 1063 (1920) (codified as amended at 16 U.S.C. §§ 791-828).

^{318.} See supra Part IV.A.

^{319.} See supra Part IV.A.

^{320.} See generally West Virginia v. EPA, 142 S. Ct. 2587 (2022).

^{321.} See supra notes 249-252 (states that contested new transmission facilities in the last two decades).

^{322.} See Piedmont Env't Council v. FERC, 558 F.3d 304 (4th Cir. 2009).

priority NIETC transmission corridors to site lines.³²³

The District³²⁴ and Circuit Court³²⁵ in *Transource* declared that the proposed new Pennsylvania transmission line does not qualify for and is not entitled to the new IIJA Section 216 NIETC preemption. Even if subject to this exception, without prior state permission, state-owned land cannot be taken by federal eminent domain for transmission infrastructure upgrades or use. ³²⁶ The Supreme Court will need to decide whether federal agencies or private non-profit ISO entities can alter its almost century-old "bright line." ³²⁷ The Court has shown no presumption in favor of implied federal preemption without congressional agreement this century. In *Murr v. Wisconsin*, the Supreme Court deferred to local judgment on the enforcement and interpretation of local zoning laws regulating new construction on, or use of, land. ³²⁸ The Supreme Court held that states retain "traditional and primary power over land and water use." ³²⁹

B. Implied Federal Supremacy

What has altered is a much different federal energy and utility policy rapidly implemented through executive branch actions and orders. Deploying discretion, President Trump rather than facilitating more transmission infrastructure to support renewable energy, as the Biden Administration did through the Infrastructure Investment & Jobs Act³³⁰ and the Inflation Reduction Act,³³¹ terminated such support the One Big Beautiful Bill Act.³³² President Trump stated "We're not going to do the wind thing," during his

^{323.} See Biden-Harris Administration Announces Initial List of High-Priority Areas for Accelerated Transmission Expansion, U.S. DEP'T OF ENERGY (May 8, 2024), https://www.energy.gov/articles/biden-harris-administration-announces-initial-list-high-priority-areas-accelerated.

^{324.} Transource Pa., LLC v. DeFrank, 705 F. Supp. 3d 266, 289-90 (M.D. Pa. 2023).

^{325.} Transource Pa., LLC v. DeFrank, 156 F.4th 378-79 (3rd Cir. 2025).

^{326.} See supra notes 266–267.

^{327.} See Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205, 215–16 (1964).

^{328.} See Murr v. Wisconsin, 582 U.S. 383, 397-400 (2017).

^{329.} See Solid Waste Agency v. U.S. Army Corps of Eng'rs, 531 U.S. 159, 174 (2001) (noting that "the States' traditional and primary power over land and water use" raises "federalism questions").

^{330.} See Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, § 40105, 135 Stat. 429 (2021) (codified at various noncontiguous sections of the U.S. Code).

^{331.} See Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818 (2022) (codified at various noncontiguous sections of the U.S. Code).

^{332.} See An Act To Provide for Reconciliation Pursuant to Title II of H. Con. Res. 14, Pub. L. No. 119-21, 139 Stat. 72 (2025) (rolling back renewable energy tax credits); Exec. Order No. 14,315, 90 Fed. Reg. 130 (July 7, 2025); see also The "One Big Beautiful Bill" Act – Navigating the New Energy Landscape, SIDLEY (July 15, 2025), https://www.sidley.com/en/insights/newsupdates/2025/07/the-one-big-beautiful-bill-act-navigating-the-new-energy-landscape.

inaugural parade, "[b]ig ugly windmills, they ruin your neighborhood."³³³ Notwithstanding Supreme Court decisions, the Third Circuit created new implied federal preemption of other statutory and constitutional law in *Transource*, notwithstanding express contrary statutory provisions.

In April 2025, FERC Chairman Christie noted key stakeholders' failure to honor prior admitted requirements directly at issue in the pending *Transource* case:

"[A]s Willy Loman's wife said in Death of a Salesman, 'attention must be paid." ... Virginia (AEP-VA) also sought and received approval from the Virginia Commission to join PJM. As with Dominion's order of approval, AEP's approval order incorporated a Stipulation that included" that state law still required: "... a certificate of public convenience and necessity prior to commencing to construct an electric generation facility or transmission facilities. AEP is one of the owners of Transource." The position asserted by Transource is "... vigorously opposed by all the states as expressed by the National Association of Regulatory State Commissioners (NARUC)." 334

The current administration also is attempting to reduce any federal role and defer more to state authority regarding energy planning and siting.³³⁵ President Trump directed all agencies to review and repeal "without notice and comment, where doing so is consistent with the 'good cause' exception in the Administrative Procedure Act... when that process would be 'impracticable, unnecessary, or contrary to the public interest," and any regulations that now appear unconstitutional or exceed statutory authority or

^{333.} See Brad Plumer, U.S. Wind Power Faces Huge Challenges After Trump Orders a Crackdown, N.Y. TIMES (Jan. 21, 2025), https://www.nytimes.com/2025/01/21/climate/wind-power-executive-order-trump.htm; see also Sam Meredith, Renewable Giants Shrug Off Trump's Anti-Wind Policies: 'Electrification Is Absolutely Unstoppable', CNBC (Jan. 22, 2025), https://www.cnbc.com/2025/01/22/renewable-energy-giants-shrug-off-trumps-anti-wind-policies.html (explaining that President Trump temporarily suspended new or renewed leases for offshore and onshore wind projects and halted the leasing of wind power projects on the outer continental shelf).

^{334.} See E-11: Chairman Christie's Concurrence in PJM/Transource, ER25-612, (FERC Apr. 17, 2025), https://www.ferc.gov/news-events/news/e-11-chairman-christies-concurrence-pjmtransource-er25-612 (statement of Chairman Christie on Docket No. ER25-612-000).

^{335.} See Unleashing American Energy, Exec. Order No. 14,154, 90 Fed. Reg. 8353 (Jan. 29, 2025) (requiring deregulation of actions burdening energy resource development); Temporary Withdrawal of All Areas on the Outer Continental Shelf From Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects, 90 Fed. Reg. 8363 (Jan. 20, 2025) (ceasing and ordering review of federal wind leasing and permitting).

intrude on state jurisdiction to implement recent Supreme Court decisions.³³⁶ The first of those Supreme Court decisions in President Trump's order are two Supreme Court decisions on energy discussed in this Article: *Loper Bright Enterprises v. Raimondo*³³⁷ and *West Virginia v. EPA*.³³⁸ The Trump Administration also issued an executive order for the Department of Justice to investigate states that are overreaching their authority regarding the interstate movement of all types of energy.³³⁹ These executive orders collectively refocus federal energy policy regarding upgraded electric transmission infrastructure, which is a prerequisite to successfully siting new large-scale electric generation to serve an unprecedented current increase in demand for U.S. power.³⁴⁰

Land-use control in the American legal system is predominately a local, rather than federal, exercise of legal jurisdiction.³⁴¹ Local land-use regulation enjoys broad court deference and is overturned by the judiciary only if there is no rational purpose supporting enactment of the local or state ordinance.³⁴² In the last three years, there is now a Major Questions Doctrine further restricting Executive Branch action and arising from a case regarding regulation of electric power and climate issues.³⁴³

^{336.} Memorandum on Directing the Repeal of Unlawful Regulations, 2009 DAILY COMP. PRES. DOC. 00466 (Apr. 9, 2025).

^{337. 144} S. Ct. 2244 (2024).

^{338. 142} S Ct. 2587 (2022); see supra Part II.

^{339.} See Protecting American Energy from State Overreach, Exec. Order No. 14,260, 90 Fed. Reg. 15513 (Apr. 14, 2025).

^{340.} See supra Part II.C.1.

^{341.} See Ecogen, LLC v. Town of Italy, 438 F. Supp. 2d 149, 157 (W.D.N.Y. 2006) (quoting Greene v. Town of Blooming Grove, 879 F.2d 1061, 1063 (2d Cir. 1989)); see also John R. Nolan, Historical Overview of the American Land Use System: A Diagnostic Approach to Evaluating Governmental Land Use Control, 23 PACE ENV'T L. REV. 821, 821–22 (2006).

^{342.} See e.g., Ecogen LLC, 438 F. Supp. 2d at 156 ("In order to prevail on its substantive due process claim, Ecogen must establish that the Moratorium, at least insofar as it prohibits Ecogen's construction of a substation, bears no rational relationship to any legitimate governmental purpose.").

^{343.} West Virginia v. EPA, 142 S. Ct. 2587 (2022).