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SUPREME COURT STRIPS STATES OF THEIR POWER OVER THE WORLD'S SECOND MOST IMPORTANT TECHNOLOGY

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"[E]nergy is the golden thread that connects economic growth, increased social equity and an environment that allows the world to thrive."

> —Ban Ki-moon¹ U.N. Secretary-General

I. GOLDEN THREADS IN THE LAW

Energy is the golden thread woven through the U.S. economy and underwriting social welfare. The U.S. Supreme Court, in 2016, stripped forty-seven of the fifty states of the power they assumed that they had over the future of power in America - that power also dictates whether and how we address how the Planet warms. In two 2016 decisions, the Supreme Court re-stitched the constitutional separation of power between state and federal levels of government. The Supreme Court reconstructed a "bright line" separating the power of the federal government from state

¹Press Release, Secretary-General, Sustainable Energy 'Golden Thread' Connecting Economic Growth, Increased Social Equity, Secretary-General Tells Ministerial Meeting, U.N. Press Release SG/SM/15839-EN/288 (May 12, 2014).

governments to regulate the second most important technology in America and the world.² This article analyzes these two Supreme Court and three other federal 2016 decisions that create an impenetrable "bright line" division in American law.

Electricity is the foundation of the modern economy,³ with a delivered value in the U.S. of approximately \$375 billion annually,⁴ exceeding the total amount of corporate income taxes collected in the U.S.⁵ The high-voltage electricity transmission network was recognized by engineers as the most important engineering feat of the 20th century.⁶ The second most important invention in human history is electric power,⁷ harnessed for the first time less than 150 years ago.⁸ The operation and sale of electricity and its transmission are controlled by law. The legal conundrum is that U.S. law treats electricity differently than every other commodity and service in America. The Constitution constructs a legal "bright line" separating the power of federal and state government to exercise any control.⁹ This unusual regulatory division is made based exclusively on whether a

² See James Fallows, *The 50 Greatest Breakthroughs Since the Wheel*, ATLANTIC MONTHLY (Nov. 2013), https://www.theatlantic.com/magazine/archive/2013/11/innovations-list/309536/. Electricity finished behind only the movable type printing press. *Id.* Electricity is essential to operate seven other "top fifty" inventions of all time: The Internet, computers, airconditioning, radio, television, the telephone, and semiconductors. *Id.*

³1 STEVEN FERREY, LAW OF INDEPENDENT POWER § 2:1 (42d ed. 2017).

⁴See Electric Power Monthly February 2012, U.S. ENERGY INFO. ADMIN. 115 (2012), https://www.eia.gov/electricity/monthly/current_year/february2012.pdf (calculating total electricity revenue at more than \$370 billion in 2011). The average delivered price of all electricity nationwide in 2011 was \$0.0999/kWh, and \$0.1180/kWh for residential customers. *Id.* at 116.

⁵ Amount of Revenue by Source, TAX POLICY CTR. (Feb. 15, 2017), http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=203.

⁶Mason Willrich, *Electricity Transmission Policy for America: Enabling a Smart Grid, End to End*, THE ELECTRICITY J., Dec. 2009, at 77.

⁷Fallows, *supra* note 2. Only the moving-type printing press ranked as more important. *Id.* And the movable type printing press is now significantly replaced by electric-electronic media for print. Electricity is the signature technology of modern civilization. *See id.*

⁸FERREY, *supra* note 3, § 3:1. Many modern inventions utilize electricity, and have no substitutes to operate in any other modes. Electricity is essential to operate seven other "top fifty" inventions of all time: The Internet, computers, air-conditioning, radio, television, the telephone, and semiconductors. Fallows, *supra* note 2.

⁹ See infra Sections II–IV.

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particular transaction is labeled as "wholesale" or retail, 10 and is not followed for anything in the U.S. other than power.

This article strategically dissects the new jurisdictional line mandated by the Constitution and announced by the Supreme Court in *Hughes v. Talen Energy Marketing*¹¹ and in *FERC v. Electric Power Supply Association*, ¹² in 2016. In this article, the dissected elements are reassembled in context of several other 2016 critical federal decisions on power:¹³

- The Supreme Court in *Hughes* in 2016 reinforces a "bright line" excluding state power. 14
- The Supreme Court in *EPSA* in 2016 enlarged what the federal government may regulate on its side of that jurisdictional "bright line." ¹⁵
- Key federal decisions by the Second, Third, Fourth, Seventh, Eighth, and D.C. Circuit Courts of Appeals construct exclusively federal constitutional control over power transactions.
- Two Federal Energy Regulatory Commission (FERC) 2016
 Orders struck in their entirety two state energy orders on future energy supply.

Never before have the Supreme Court and other federal courts issued this number of key constitutional orders on power in such a compressed period of time. These key decisions interpret the Supremacy Clause of the Constitution separating government power, and determine the future of American power. This article analyzes and reassembles this unprecedented re-sculpting of constitutional power.

Section II starts at the top: It analyzes the Supreme Court's two 2016 watershed decisions, which reconfigure constitutional limits on American state power. The decision in *Hughes* grants deference only to the federal government regarding the separation of power between state and federal government, creating a "bright line" excluding state authority. The 2016 *EPSA* decision of the Supreme Court enlarges expansive federal powers

^{10 16} U.S.C. § 824a(f) (2012).

^{11 136} S. Ct. 1288, 1298 (2016).

^{12 136} S. Ct. 760, 784 (2016).

¹³ See infra Sections III-IV.

¹⁴ See Hughes, 136 S. Ct. at 1292.

¹⁵ See Elec. Power Supply, 136 S. Ct. at 784.

¹⁶See infra Section II.A.

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within this line.¹⁷ Two 2016 Supreme Court decisions delineate a "bright line" restricting power in America, analyzed by this article.

Section III supplies the legal context created by energy Supremacy Clause decisions rendered by the D.C., ¹⁸ Second, ¹⁹ Third, ²⁰ Fourth, ²¹ Seventh, ²² and Eighth ²³ Circuit Courts of Appeals. In each decision, states were found to have taken unconstitutional actions, their laws nullified, and in some cases states are sanctioned. ²⁴ Section IV analyzes recent FERC decisions striking energy actions in states within the Sixth ²⁵ and Ninth Circuits. ²⁶ Along with the circuit court opinion examined in Sections II and III, state energy regulatory actions covered by two-thirds of the federal circuits have been recently ruled unconstitutional and entirely stricken.

Section V plumbs the reconstructed dimensions and depth of the new legal architecture created in 2016 by the Supreme Court and other federal courts for the second most important invention in history.²⁷ The 2016 Supreme Court decisions affect only forty-seven of the fifty states.²⁸ This new constitutional "bright line" affects how, and if, the United States addresses rapid climate change.

Next, in Section II, this article examines the golden thread, stitch-bystich, woven through the *Hughes* and *EPSA* Supreme Court opinions that create the law's "bright line."

¹⁷ See infra Section II.B.

¹⁸ See infra Section III.D.

¹⁹ See infra Section III.C.

²⁰See infra Section III.A.

²¹ See infra Section II.A.3.

²² See infra Section III.D; MISO Transmission Owners v. FERC, 819 F.3d 329, 337 (7th Cir. 2016).

²³ See infra Section III.B.3.

²⁴ See infra note 177 for a discussion of how states have been ordered to pay challengers' attorney fees, which have run well into seven figures per level of court or appeal.

²⁵ See infra Section IV.A.

²⁶ See infra Section IV.B. See also So. Cal. Edison Co., 132 FERC ¶ 61047, 61337–38 (2010).

²⁷ Fallows, *supra* note 2.

²⁸ Steven Ferrey, *Carbon Outlasts the Law: States Walk the Constitutional Line*, 41 B.C. ENVTL. AFF. L. REV. 309, 312 (2014). *See generally* Hughes v. Talen Energy Mktg., LLC 136 S. Ct. 1288 (2016). *See also generally* FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760 (2016).

II. THE SUPREME COURT, POWER, CIRCA 2016

A. "Bright Lines" 1: The 2016 Supreme Court Hughes Decision

1. State Regulation to Attract Power Generation

An energy regulation in Maryland, which operates within an interstate wholesale power market, caused a legal challenge under the Supremacy Clause and the Commerce Clause of the Constitution.²⁹ Maryland adopted competitive retail markets along with a dozen other states at the end of the 20th century,³⁰ and had its retail utilities participate in the PJM Independent Service Organization (ISO).³¹ PJM operates the "'largest centrally dispatched power market . . . in the world,' covering 60 million customers and 185,000 megawatts" (Mw) of power generation, comprised of the District of Columbia and all or part of thirteen states, including Maryland.³²

The PJM market regulates and controls all wholesale sale of power through an interstate, federally-regulated power market.³³ The PJM interstate wholesale "capacity auction" is designed to ensure that winning electricity generation will be constructed to meet future demand, taking bids approximately three years in advance of need and selecting future generator bids from proposals which agree to install the selected power generating capacity within that three year window.³⁴ PJM provides capacity payments

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²⁹ PPL Energyplus, LLC v. Nazarian, 974 F. Supp. 2d 790, 796 (D. Md. 2013), aff'd, 753 F.3d 467 (4th Cir. 2014), aff'd sub nom. Hughes v. Talen Energy Mktg., LLC 136 S. Ct. 1288 (2016).

³⁰Map of Deregulated Energy States and Markets, ELECTRIC CHOICE, https://www.electricchoice.com/map-deregulated-energy-markets/ (last visited March 18, 2017).

³¹ See generally Who We Are, PJM INTERCONNECTION, http://pjm.com/about-pjm/who-we-are.aspx (last visited March 18, 2017).

 $^{^{32}} PPL$ Energyplus, LLC v. Hanna, 977 F. Supp. 2d 372, 378–79 (D.N.J. 2013), $\it aff'd~sub~nom.$ PPL Energyplus, LLC v. Solomon, 766 F.3d 241 (3d Cir. 2014).

³³ Electric Power Markets: PJM, FERC (May 25, 2016), https://www.ferc.gov/market-oversight/mkt-electric/pjm.asp.

³⁴ Hughes, 136 S. Ct. at 1293. If a capacity owner's bid is accepted, it is said to have "cleared" the auction. *Id.* at 1296. Capacity owners that have cleared the market by remaining in as the bid price bar is lowered are all paid the clearing price for capacity, which is the price of the highest accepted bid. *Id.* at 1293. FERC's Minimum Offer Price Rule requires new generators to submit their initial bids at a price set by the grid operator unless they can demonstrate that this price exceeds their actual costs. *Id.* at 1294. Once a capacity owner has submitted a clearing bid, in subsequent rounds of the auction, it can submit a lower bid of its own choosing, and may be able to take advantage of the New Entry Price Adjustment (NEPA) rule, which guarantees stable prices for three years. *Id.*

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to winning generation facilities in the capacity auction for siting new power generation selected as the most competitive capacity auction bids throughout this thirteen state area.³⁵

Within this PJM market rubric, Maryland adopted a regulatory scheme to cause new power generation facilities to locate in its state rather than elsewhere in the PJM region. Maryland required its utilities to enter longterm "contracts for differences" (CfD)-a form of "power purchase agreement" (PPA)-only with certain designated independent power producers willing to locate their new electricity generation capacity in Maryland or in the District of Columbia.³⁶ Maryland law required its utilities to enter into a twenty-year CfD with the winning in-state project bidder; Commercial Power Ventures, Maryland (CPV) won this entitlement.³⁷ This CfD established the final wholesale rates that CPV would receive for a twenty-year period – comprised, in part, by capacity payment from the PJM capacity auction and, in part, from Maryland "topping off" the amount received to the amount submitted by CPV in return for locating in Maryland.³⁸ The Maryland CfD scheme contained a provision that notwithstanding the amount of revenue earned from PJM capacity market for its wholesale capacity value of the facility, Maryland ratepayers, through their utilities, would provide extra amounts to 'top-off' that price to the price originally agreed by Maryland, not to exceed the Maryland CfD ceiling amount. In their lawsuit, constitutional concerns were raised by petitioners which were wholesale power generators which were not selected for this premium treatment by Maryland.³⁹

2. The Federal District Court and the Supremacy Clause

Plaintiffs in the *Hughes* case claimed that the state CfD was preempted by the Supremacy Clause doctrine of field preemption, in which the federal regulatory program completely occupies the wholesale electricity market, and, moreover, is preempted by conflict preemption if the Maryland public

³⁸*Id.* If CPV's winning bid for capacity payments was less than the Maryland contract price, Maryland utilities would pay it the difference; if the reverse, CPV would pay the Maryland utilities the difference. *Id.* at 1295. Consequently, CPV had no incentive to submit its true competitive auction bid.

³⁵ Id. at 1293.

³⁶*Id*. at 1294.

³⁷ *Id*.

³⁹FERREY, *supra* note 3, § 5:18 (internal citations omitted).

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utility commission regulatory action conflicts with FERC federal wholesale markets, which for Maryland include a regional FERC regulation through a13-state PJM wholesale market.⁴⁰ The Supremacy Clause of the Constitution creates three types of federal preemption of state laws.⁴¹ Maryland retail utilities, which were required to divest their power generating facilities, must purchase energy for their retail customers on the federally regulated wholesale PJM interstate market.⁴² The trial court had a rich range of Supremacy Clause precedent for electric power to consider in determining its initial opinion.

Ninety years ago, the Supreme Court originally held that the Commerce Clause of the Constitution, while empowering the federal government to regulate interstate commerce, prohibited state and local regulators from regulating many interstate transactions, including interstate wholesale sales. The Federal Power Act of 1935 filled this regulatory gap by providing, when enacted more than eighty years ago, that FERC has jurisdiction over interstate and wholesale power sales; however, its authority does not extend to "any other sale of electric energy." For electric energy, the Federal Power Act of 1935 establishes the division of power over power. Section 201(a) of the Act states that federal regulation under the statute shall "extend only to those matters which are not subject to regulation by the States." Sections 205 and 206 of the Act empower the Federal Energy Regulatory Commission (FERC) exclusively to regulate the commerce and rates for the interstate and wholesale sale and transmission of electricity in the United States.

⁴⁰*Id.* (internal citations omitted).

⁴¹English v. Gen. Elec. Co., 496 U.S. 72, 78–79 (1990); Entergy Nuclear Vt. Yankee, LLC v. Shumlin, 838 F. Supp. 2d 183, 218 (D. Vt. 2012), *aff'd in part, rev'd in part*, 733 F.3d 393 (2d Cir. 2013).

⁴² See Entergy Nuclear, 838 F. Supp. 2d at 218. Like the federal court in New Jersey at the same time (see infra at Section III.A), this court cited the preemption holding of Gade v. Nat'l Solid Wastes Mgmt. Ass'n, 505 U.S. 88, 108 (1992).

 $^{^{43}}$ See Pub. Utils. Comm'n of R.I. v. Attleboro Steam & Elec. Co., 273 U.S. 83, 89–90 (1927); see also Federal Power Act of 2005 (FPA) § 201, 16 U.S.C. § 824 (2012).

⁴⁴*Id.* § 824(b)(1).

⁴⁵*Id.* § 824(a).

^{46 16} U.S.C. §§ 824d, 824e.

⁴⁷ See Pub. Util. Dist. No. 1 of Snohomish Cty. Wash. v. FERC, 471 F.3d 1053, 1058 (9th Cir. 2006), aff'd in part, rev'd in part sub nom. Morgan Stanley Capital Grp. Inc. v. Pub. Util. Dist. No. 1 of Snohomish Cty., 554 U.S. 527 (2008).

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When courts render a Supremacy Clause decision, the Commerce Clause of the Constitution is part of the tapestry. The Commerce Clause is the basis of the Federal Power Act⁴⁸ and FERC regulation of interstate and wholesale power. The Supremacy Clause restricts state exercise of power over exclusively federal measures. Often legal cases raise both constitutional claims. And often when the court finds one of these clauses violated, on appeal the other constitutional clause is utilized. The Commerce Clause is

Pursuant to interpretation of the Act and the Supremacy Clause, the U.S. Supreme Court established a "bright line" between federal and state jurisdiction: The Court held that Congress meant to draw a "bright line," easily ascertained and not requiring case-by-case analysis, between state and federal jurisdiction. Where a transaction is subject to exclusive federal FERC jurisdiction, inferior state regulation is preempted under the Supremacy Clause pursuant to a long-standing and consistent line of Supreme Court holdings. The rates, terms, and provisions of any wholesale sale or transmission of electricity in interstate commerce are solely within federal jurisdiction and control, not state authority: TERC has exclusive authority to determine the reasonableness of wholesale

⁴⁸ 16 U.S.C. § 824(a).

⁴⁹ See supra Section II.A; see also infra Sections III.A and III.C.

⁵⁰ See discussion of Heydinger, infra Section III.A.

⁵¹ Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205, 215–16 (1964).

⁵²New Eng. Power Co. v. New Hampshire, 455 U.S. 331, 338 (1982). The Supreme Court overturned an order of the New Hampshire Public Utilities Commission which restrained within the state, for the financial advantage of in-state ratepayers, low-cost hydroelectric energy produced within the state: "Our cases 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." *Id.* (citation omitted). *See also* Entergy La., Inc. v. La. Pub. Serv. Comm'n, 539 U.S. 39 (2003); Miss. Power & Light Co. v. Miss. *ex rel.* Moore, 487 U.S. 354 (1988); Nantahala Power & Light Co. v. Thornburg, 476 U.S. 953 (1986); Mont.-Dakota Utils. Co. v. Nw. Pub. Serv. Co., 341 U.S. 246 (1951).

⁵³New Eng. Power, 455 U.S. at 340. The Supreme Court concluded that "§ 201(b) simply saves from pre-emption under Part II of the Federal Power Act such state authority as was otherwise 'lawful[,]'" and that "[n]othing in the legislative history or language of the statute evinces a congressional intent 'to alter the limits of state power otherwise imposed by the Commerce Clause." *Id.* at 341 (citations omitted).

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rates."⁵⁴ "It is common ground that if FERC has jurisdiction over a subject, the States cannot have jurisdiction over the same subject."⁵⁵

Where a state imposes a wholesale contract rate different than that set by FERC by either "law or policy," the "contracts will be considered to be void *ab initio*." 56 With both clauses of the Constitution working in tandem, when a transaction is subject to exclusive federal FERC jurisdiction and regulation, state regulation is preempted as a matter of federal law and the U.S. Constitution's Commerce Clause, according to a long-standing and consistent line of rulings by the U.S. Supreme Court.⁵⁷ The Federal Power Act creates a "bright line' . . . between state and federal jurisdiction, with wholesale power sales... falling on the federal side of the line."58 "Congress meant to draw a bright line[,] easily ascertained" and not requiring case-by-case analysis, between state and federal jurisdiction.⁵⁹ The federal district court for Maryland, when it dealt with the Hughes matter at the trial stage, held that this Maryland regulation was "field preempted."60 "The doctrine of field preemption forecloses state regulation in a field occupied entirely by the federal government, even if the state's purpose is admirable or the state regulation does not conflict with achievement of the federal scheme."61

⁵⁴ Miss. Power & Light Co., 487 U.S. at 371; accord Pub. Util. Dist. No. 1 of Snohomish Cty. Wash. v. FERC, 471 F.3d 1053, 1058 (9th Cir. 2006), aff'd in part, rev'd in part sub nom. Morgan Stanley Capital Grp. Inc. v. Pub. Util. Dist. No. 1 of Snohomish Cty., 554 U.S. 527 (2008).

⁵⁵Miss. Power & Light Co., 487 U.S. at 377 (Scalia, J., concurring).

⁵⁶Conn. Light & Power Co., 70 FERC ¶ 61,012, ¶ 61,029–30 (1995).

⁵⁷ See New Eng. Power, 455 U.S. at 341. The Supreme Court overturned an order of the New Hampshire Public Utilities Commission that restrained within the state, for the financial advantage of in-state ratepayers, low-cost hydroelectric energy produced within the state. *Id.* at 344. It held this to be an impermissible violation of the dormant Commerce Clause of the U.S. Constitution, art. I, § 8, cl. 3, and the FPA, 16 U.S.C. §§ 791–828 (2012): "Our cases 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." *Id.* at 337–38; *see also Morgan Stanley*, 554 U.S. at 531; *Entergy*, 539 U.S. at 50; *Miss. Power*, 487 U.S. at 377; *Nantahala Power*, 476 U.S. at 964; *Mont.-Dakota*, 341 U.S. at 251.

⁵⁸ *Pub. Util. Dist. No. 1*, 471 F.3d at 1066 (citing the separate Supreme Court opinions in *Nantahala, Southern California Edison*, and *Mississippi Power*).

⁵⁹ Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205, 215–16 (1964).

⁶⁰PPL EnergyPlus, LLC v. Nazarian, 753 F.3d 467, 474 (4th Cir. 2014).

⁶¹PPL EnergyPlus, LLC v. Nazarian, 974 F. Supp. 2d 790, 840 (D. Md. 2013) (citation omitted), aff'd, 753 F.3d 467 (4th Cir. 2014), aff'd sub nom. Hughes v. Talen Energy Mktg., 136 S. Ct. 1288 (2016).

The state of Maryland energy regulatory commission was found by the federal trial court to be prohibited to dictate the final inclusive price received for wholesale capacity sales transacted through the PJM markets because they violated the Supremacy Clause under the Federal Power Act:

[T]he PSC's objective certainly fell within that traditional state purview continually referenced by Defendants, but the manner in which the PSC accomplished that objective involved establishing the amount received by CPV for its wholesale activity in the PJM Markets. Regulating in the field of wholesale price-setting is occupied by FERC, so therefore the strong presumption against preemption is not present.⁶²

The federal trial court held that this scheme intruded on FERC's exclusive authority to set interstate wholesale rates, given the operation of "the CfD payments [which] had the effect of setting the ultimate price that CPV receives for its sales in the PJM auction." The court found field preemption, and therefore chose not to decide whether conflict preemption was also prohibiting the state's action.

3. The 4th Circuit Court of Appeals and the Supremacy Clause

The Fourth Circuit Court of Appeals unanimously held that the Maryland program was 'field preempted because it functionally set the rate that CPV receive[d] for its sales in the [wholesale] auction". 64 The Circuit Court relied on a "wealth of case law [that] confirms FERC's exclusive power to regulate wholesale sales of energy in interstate commerce." 65 Clearly reinforcing the 'bright line' separating state and federal power over energy, the Circuit Court unanimously held that 'if FERC has jurisdiction over a subject the States cannot have jurisdiction over the same subject. 66 The court also noted that the Supreme Court made certain federal authority plenary and thus impliedly field preempted for states:

Congress meant to draw a bright line easily ascertained, between state and federal jurisdiction This was done in

 $^{^{62}\}mbox{\it PPL EnergyPlus},\,974$ F. Supp. 2d at 840 n.60.

⁶³PPL EnergyPlus 753 F.3d at 474.

⁶⁴ *Id*.

⁶⁵ Id. at 475.

⁶⁶ Id.

the [FPA] by making [FERC] jurisdiction plenary and extending it to all wholesale sales in interstate commerce except those which Congress has made explicitly subject to regulation by the States.⁶⁷

In assessing the overall impact of such a CfD scheme, the Fourth Circuit unanimously concluded that if Maryland's scheme was standing, it 'compromises the integrity of the federal scheme and intrudes on FERC's jurisdiction." Importantly, for clear interpretation of the Supreme Court decision which would follow later, the Fourth Circuit relied on the core field preemption Supreme Court opinion in Mississippi Power & Light Co. v. Mississippi ex rel. Moore, 487 U.S. 354 (1988). Regarding any traditional presumption against preemption of state authority, while it exists in some areas of law, the Fourth Circuit noted that it does not exist for electric power markets:

> However, the presumption "is not triggered when the State regulates in an area where there has been a history of significant federal presence." The presumption "is almost certainly not applicable here because the federal government has long regulated wholesale electricity rates." Nevertheless, even were we to apply the presumption, we would find it overcome by the text and structure of the FPA, which unambiguously apportions control over wholesale rates to FERC.⁶⁹

The court articulated the "bright line" separating exclusive state and federal authority over power:

> [T]he Supreme Court has expressly rejected the proposition that the "scope of [FERC's] jurisdiction . . . [sic] is to be determined by a case-by-case analysis of the impact of state regulation upon the national interest." Instead, "Congress meant to draw a bright line easily ascertained, between state and federal jurisdiction This was done in the [FPA] by making [FERC] jurisdiction plenary and extending it to all wholesale sales in interstate commerce

 $^{^{67}}$ Id.

⁶⁸FERREY, supra note 3, § 5:18 (footnote omitted).

⁶⁹ PPL EnergyPlus, 753 F.3d. at 477 (citations omitted).

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except those which Congress has made explicitly subject to regulation by the States."

The federal scheme thus "leaves no room either for direct state regulation of the prices of interstate wholesales of [energy], or for state regulations which would indirectly achieve the same result." "Even where state regulation operates within its own field, it may not intrude indirectly on areas of exclusive federal authority." As a result, states are barred from relying on mere formal distinctions in "an attempt" to evade preemption and "regulate matters within FERC's exclusive jurisdiction."

"The Court of Appeals in the PJM Maryland decision concluded that the FERC-administered PJM market is 'a finely-wrought scheme.... The federal scheme is carefully calibrated to serve a host of competing interests. It represents a comprehensive program of regulation that is quite sensitive to external tampering." While the court again noted that "not every state regulation that incidentally affects federal markets is preempted," it found the Maryland program "a bridge too far."

4. The Supreme Court and the Supremacy Clause

"The Supreme Court in 2016 unanimously upheld the Fourth Circuit opinion. The Supreme Court concluded, regarding the Maryland statute, that the CdF intrudes on what is under applicable law exclusive FERC wholesale market authority: 'Maryland's program sets an interstate wholesale rate, contravening the FPA's [Federal Power Act's] division of authority between state and federal regulators." The Court unanimously concluded "We affirm the Fourth Circuit's judgment."

The Court identified that the Maryland program presents the same legal constitutional problems that the Court identified three decades before in two seminal opinions, *Mississippi Power & Light* and *Nantahala Power & Light* Co. 75 In *Nantahala Power & Light Co.*, the Supreme Court found field

⁷⁰ *Id.* at 475–76 (citations omitted).

⁷¹ FERREY, *supra* note 3, § 5:18 (footnote omitted).

⁷² PPL EnergyPlus, 753 F.3d. at 479–80.

⁷³ FERREY, *supra* note 3, § 5:18 (footnotes omitted).

⁷⁴ Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288, 1292 (2016).

⁷⁵ *Id.* at 1298.

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preemption of state-retail-rate regulation that conflicts with wholesale power rates approved or managed by FERC.⁷⁶ The Court held that "FERC clearly has exclusive jurisdiction over the rates to be charged . . . interstate wholesale customers."⁷⁷

In *Hughes*, the Supreme Court articulates that, "[w]e agree with the Fourth Circuit's judgment that Maryland's program sets an interstate wholesale rate, contravening the FPA's division of authority between state and federal regulators." The Fourth Circuit holds that "[t]he FPA leaves no room either for directFalseor for regulation that would indirectly achieve the same result." Prior to the written opinion by Justice Ginsburg, the author of the Court's opinion in the *EPSA* decision, Justice Kagan, at oral argument, stated:

"I'm not sure why it is that when you say it was subject to FERC's jurisdiction that doesn't end the case right there against you,"

... [I]t's FERC's authority "to set the rates and other terms of wholesale sales, and that's not for the states to do. So that means you're preempted." 81

There were two concurring opinions written separately by Justices Thomas and Sotomayor. Justice Sotomayor would not find field preemption as did seven other justices, but instead would find only conflict preemption. ⁸² Justice Thomas stated that neither implied field preemption

[She] said the case is an example of conflict preemption, wherein a federal law preempts a state law that conflicts with the federal law.

She said that Maryland's subsidy program intruded into FERC's mechanism for setting wholesale electricity rates.

⁷⁶Nantahala Power & Light Co. v. Thornburg, 476 U.S. 953, 966 (1986) ("plenary" jurisdiction of FERC concerning interstate wholesale rates; not limiting state role regarding prudency of buyer's decision to purchase power).

⁷⁷ *Id.* at 966.

⁷⁸ Hughes, 136 S. Ct. at 1297.

⁷⁹ Id.

⁸⁰ See infra Section II.B.

⁸¹Rebecca Kern, *Justices Appear Convinced State Subsidy Enters FERC Turf*, ENERGY & CLIMATE REP., Feb. 24, 2016, at 20.

 $^{^{82}}$ Hughes, 136 S. Ct. at 1300 (Sotomayor, J., concurring). At oral argument on the Hughes case, Justice Sonia Sotomayor expressed her doubts about the presence of a field preemption issue:

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nor implied conflict preemption need be invoked in the Maryland matter, because there is express preemption in the Federal Power Act itself. ⁸³ His concurring opinion also cites the same prior decisions of the Supreme Court in *Mississippi Power* and in *Nantahala Power*, cited by Justice Ginsburg in writing for seven justices. ⁸⁴ Justice Thomas specifically cites to the Court's opinion earlier in 2016 in *FERC v. Electric Power Supply Association*, as also reinforcing a line that cannot be crossed even indirectly through "fiddling with the effective . . . price." ⁸⁵

The Justices split seven-one-one as to what type of preemption was present, but all agreed that Maryland regulation affecting wholesale power market rates was preempted:

- one Justice in his concurring opinion found express preemption⁸⁶
- one Justice in her concurring opinion found only conflict preemption⁸⁷
- seven Justices upheld the Fourth Circuit finding of both field and conflict preemption. 88

This decision does not grant any deference to Maryland or state agencies. It expands FERC deference. Notably, only for the second most important invention, electricity, and no other, is the law applied in this way. Unique to electric power, jurisdiction is separated by a legal "bright line" allocating exclusive control to federal and state government depending on whether a transaction is labeled as "wholesale" or "retail." Nowhere else in American law, other than energy, is so divided and so "outcomedeterminative" with a Supreme Court "bright line."

. . . .

However, Sotomayor said she wasn't convinced the case was necessarily an example of field preemption, which would involve a broader ruling. In field preemption, a federal law can preempt an entire area, or field, so it leaves no room for state regulation.

Kern, supra note 81, at 20-21.

⁸³ Hughes, 136 S. Ct. at 1301 (Thomas, J., concurring).

⁸⁴See id.

⁸⁵ Id. For more on the EPSA case, see infra Section II.B.

⁸⁶ Hughes, 136 S. Ct. at 1301 (Thomas, J., concurring).

⁸⁷ Id. at 1300 (Sotomayor, J., concurring).

⁸⁸ *Id.* at 1292.

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The Court's companion 2016 *EPSA* decision determined exactly how far that FERC deference extends on innovative power technologies that must play a part to mitigate the world problem of climate change.

B. "Bright Lines" 2: The 2016 Supreme Court Epsa Decision

1. Demand, Response: FERC Order 745

Earlier in 2016, only a few months before the *Hughes* unanimous opinion, the Supreme Court issued the *FERC v. Electric Power Supply Association* decision. ⁸⁹ *EPSA* construed whether FERC, through its Order 745, could exercise control over the pricing of demand response resources when they participate in interstate ISO wholesale capacity markets. ⁹⁰ Demand response is an alternative to building more power generation capacity for an electric system. Rather than generating more power, demand response assigns an obligation for certain volunteering consumers to agree to cut power demand by a specified amount when the system needs more power generation resources, in return for ISO capacity payments for their willingness to make these reductions when, and if, needed.

Cutting demand, in lieu of increasing supply, keeps the electric generation system in necessary balance.

The "grid" is composed not only of the approximately 4,800 interconnected power generation resources in the United States, but also of the cable to connect them with consumers, and the hardware to manage them in an energized instantaneous network. The high-voltage transmission network, at 230 kV and higher comprises 167,000 miles of line in America. The transmission system operates at fifteen different voltage levels. 91

"The grid is 'a constantly replenished energized network' and requires 'a constant simultaneous balancing of supply and demand,' in a setting

⁸⁹ FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760 (2016).

⁹⁰ Id. at 771-73

⁹¹ Steven Ferrey, *Pentagon Preemption: The 5-Sided Loss of State Energy and Power*, 2014 U. ILL. J.L. TECH. & POL'Y 393, 410 (2014) (footnote omitted).

where 'power moves according to Kirchoff's Law almost at the speed of light." ⁹²

The electric-power grid must constantly balance supply with demand in order to keep the grid operational, but such balance is not always possibly given current technology, leading to serious consequences. If power supply does not respond and is deficient to instantaneous demand, the grid can shut down and black out large areas, as happened in the northeastern United States on August 14, 2003. Moreover, "the current grid configuration in the United States already features a significant shortfall of existing modern backup power resources, particularly backup resources that are either capable of operating on dual-fuel inputs or have quick-start capability."

Demand-response occupies the opposite side of the energy equation from new intermittent renewable-energy technologies: The former reduce power demand exactly and only when necessary⁹⁴ and are among the most cost-efficient ways to make existing power systems serve demand,⁹⁵ while the latter produces intermittent power.⁹⁶ Energy conservation and demand response can be controlled and are not intermittent,⁹⁷ which contrasts with solar and wind renewable sources of supply which are intermittent.⁹⁸ Demand-response is the opposite of power sales, and thus does not implicate the Federal Power Act.⁹⁹ The cost of implementing demand-response programs is less than the cost of building new generating facilities

⁹²Steven Ferrey, *Efficiency in the Regulatory Crucible: Navigating 21st Century Smart Technology and Power*, 3 GEO. WASH. J. ENERGY & ENVTL. L. 1, 5 (2012).

⁹³ *Id.* at 15 (footnotes omitted).

⁹⁴ See 18 C.F.R. § 35.28(b)(4) (2016).

⁹⁵ Steven Ferrey, Restructuring a Green Grid: Legal Challenges to Accommodate New Renewable Energy Infrastructure, 39 Envtl. L. 977, 994–95 (2009).

⁹⁶See Steven Ferrey et al., Fire and Ice: World Renewable Energy and Carbon Control Mechanisms Confront Constitutional Barriers, 20 DUKE ENVTL. L. & POL'Y F. 125, 132 (2010) (discussing wind turbines and solar power technologies that are the "renewable power options of choice").

⁹⁷ See 18 C.F.R. § 35.28(b)(4).

⁹⁸ See Ferrey, supra note 96.

⁹⁹FPA, 16 U.S.C. § 824(b)(1) (2012). *See* Ferrey et al., *supra* note 96, at 127 (discussing some state renewable energy programs that have attempted such regulation and problematically implicated the Federal Power Act).

to supply additional power.¹⁰⁰ Conservation on the customer side of the meter implicates neither the wholesale nor the interstate sale of power, and therefore, no jurisdictional provisions of the Federal Power Act are triggered.¹⁰¹

A FERC staff report discussed the role of regional transmission organizations (RTO) and ISOs, concluding that FERC could ensure for ancillary service markets that comparable treatment was provided for demand-response resources, permit such resources to bid in to these markets that encompass approximately half of the states, and compensate their contributions of decreased power consumption and load during an operating reserve shortage. FERC embodied this in formal orders. Order 719 requires ISOs and RTOs, which are subject to exclusive federal regulation, to recognize ancillary services from demand-side management (DSM) providing demand-response resources, eliminate assessing customers certain charges when they voluntarily reduce demand during system emergencies, permit bidders in wholesale markets to bid multiple aggregated demand-response resource measures into these energy markets, and to allow market-rebalancing prices to participants.

FERC has issued several orders to enable and encourage the participation of demand response in electricity markets. ¹⁰⁵ These resources

¹⁰⁰ See Douglas Norland, Comprehensive Assessment of a Conservation and Load Reduction Program: Results of the General Public Utilities Case Study, 6 AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY 1988 SUMMER STUDY ON ENERGY EFFICIENCY IN BUILDINGS 6.166, 6.175 (1988) ("The Cost to [General Public Utilities] of a rebate program producing the greatest reduction in revenue requirements is \$272 million, of which \$21 million is for administrative costs and \$251 million is for rebate payments (all in 1985 dollars). . . . This cost is less than that of constructing a comparable power plant (estimated at \$525 million for 350 MW at \$1500 per kW). It, however, covers the cost of operation (which is not reflected in the power plant construction cost). It also is recoverable immediately (assuming expensing), produces immediate net benefits, and reduces revenue requirements on a net basis rather than increasing them.").

¹⁰¹ See 16 U.S.C. § 824(b)(1).

¹⁰²Ferrey, *supra* note 95, at 9–10.

 $^{^{103}}$ See id.

 $^{^{104}}$ *Id*.

¹⁰⁵FERC issued Order No. 719 in October 2008 to address barriers to demand response participation in ISO and RTO markets. Wholesale Competition in Regions with Organized Electric Markets, 73 Fed. Reg. 64,100, 64,103 (Oct. 28, 2008) (to be codified at 18 C.F.R. pt. 35). Order No. 719 required system operators to accept bids from qualified demand response resources and allowed aggregators to bid demand response directly into the markets. *Id.* The participation of aggregators has enabled a larger segment of the commercial, industrial, and institutional markets to participate in demand response programs. *Id.* at 64,119. Order No. 745 amended Commission

can be substantial, as the ISO New England forward-capacity auction in 2008 cleared and accepted 1,188 megawatts of new demand-response-resource bids from existing demand-response-resource bids totaling 1,366 megawatts. These demand-side bids equaled approximately eight percent of then-total peak load in the New England region. ¹⁰⁶

FERC Order 745 requires ISOs to pay contributors of demand response resources responding in times of power system need the same price that the ISO pays suppliers of conventional power. FERC's rules defined demand response as "a reduction in the consumption of electric energy by customers from their expected consumption in response to an increase in the price of electric energy" as an incentive designed to induce lower consumption of electric energy. 108

2. Court Determination of the Line

With regard to FERC Order 745, at issue was whether demand response is the sale or transmission of power? The Federal Power Act, which vests FERC with authority, gives the federal government exclusive federal jurisdiction over wholesale sales of power and transmission. ¹⁰⁹ By its very

regulations to require that demand response resources be allowed to participate in and receive compensation from competitive electricity markets in the same manner as generation resources:

[A] demand response resource participating in an organized wholesale energy market must be compensated for the service it provides at the market price for energy when the demand response resource has the capability to balance supply and demand as an alternative to a generation resource and when the dispatch of demand response resource is cost-effective.

Demand Response Compensation in Organized Wholesale Energy Markets, 137 FERC ¶ 61,215, ¶ 1 (2011). PJM, California ISO, and Southwest Power Pool filed tariff revisions in compliance with Order No. 745 in 2011, and ISO New England, New York ISO, and the Midwest ISO submitted Order No. 745 compliance filings in 2011. FED. ENERGY REGULATORY COMM'N, ASSESSMENT OF DEMAND RESPONSE & ADVANCED METERING: STAFF REPORT 14 (2011), http://www.ferc.gov/legal/staff-reports/11-07-11-demand-response.pdf. There is an ongoing battle as to whether paying demand response resources the market price for capacity, when they cut back on consumption rather than invest in generation resources, is overcompensation.

 107 Demand Response Compensation in Organized Wholesale Energy Markets, FERC Order No. 745, 134 FERC \P 61,187, \P 2 (2011). In the original FERC Order 745, Commissioner Moeller dissented stating that FERC's pricing scheme was arbitrary. Elec. Power Supply Ass'n v. FERC, 753 F.3d 216, 225 (D.C. Cir. 2014), rev'd, 136 S. Ct. 760 (2016).

¹⁰⁶Ferrey, supra note 95, at 28.

¹⁰⁸ 18 C.F.R. § 35.28(b)(4) (2016).

¹⁰⁹FPA, 16 U.S.C. §§ 824d(a), 824e(a) (2012).

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definition, 110 demand response is not a sale of energy at wholesale or power transmission, which FERC clearly would have jurisdiction to regulate under section 201 of the Federal Power Act. 111 Demand response is the non-sale of electricity. FERC based its statutory authority for these rules on its remedial authority to ensure that "all rules and regulations affecting... rates" in connection with the wholesale sales of energy are "just and reasonable." 112

When challenged as being not the sale of wholesale power and beyond the line for FERC authority, the Court of Appeals for the D.C. Circuit ruled Order 745 beyond FERC authority, since it did not involve the wholesale sale of power. The D.C. Circuit Court "found that FERC failed to address arguments that the authorized demand response payments were excessive, at the same price paid to wholesale energy suppliers." 114

The Supreme Court reversed the D.C. Circuit decision, which left Order 745 in place based on a plain language interpretation of the Federal Power Act. The Court found demand response a factor "directly affect[ing]" wholesale power markets and rates when it was bid into ISO capacity markets. Justice Kagan explained that "[t]he [Federal Power] Act makes

federal and state powers 'complementary' and 'comprehensive,' so that 'there [will] be no 'gaps' for private interests to subvert the public welfare.'" Justice Scalia and Justice Thomas dissented, calling the majority's jurisdictional analysis "extravagant." 18

However, the fact that there are no gaps bears no relationship to whether there is or is not a hard divisional line separating state and federal government authority. The Court did not go this far in *EPSA*, and certainly

¹¹⁰18 C.F.R. § 35.28(b)(4).

¹¹¹16 U.S.C. § 824(b)(1) (2012).

¹¹²16 U.S.C. §§ 824d(a), 824e(a).

¹¹³Elec. Power Supply Ass'n v. FERC, 753 F.3d 216, 218 (D.C. Cir. 2014), *rev'd*, 136 S. Ct. 760 (2016). The court also found that FERC should have reconciled whether the same price as conventional power supply was a price in excess of a fair and reasonable rate. *Id.* at 225.

¹¹⁴ Steven Ferrey, Competitive Orders, the Final Monopoly, and the Second Most Important Invention in History, 8 Ky. J. Equine Agric. & Nat. Resources L. 75, 114 (2015).

¹¹⁵FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760, 784 (2016).

¹¹⁶*Id.* at 774 (emphasis omitted).

¹¹⁷ *Id.* at 780 (quoting Fed. Power Comm'n v. La. Power & Light Co., 406 U.S. 621, 631 (1972)).

¹¹⁸ Id. at 788 (Scalia, J., dissenting).

not that far in *Hughes*,¹¹⁹ to explain the future implications. Rather than speaking of changing authority, the opinion seems more to describe which side of the existing line demand response in wholesale markets is on:

It is a fact of economic life that the wholesale and retail markets in electricity, as in every other known product, are not hermetically sealed from each other. To the contrary, transactions that occur on the wholesale market have natural consequences at the retail level. And so too, of necessity, will FERC's regulation of those wholesale matters....

... In sum, whatever the effects at the retail level, every aspect of the regulatory plan happens exclusively on the wholesale market and governs exclusively that market's rules. 120

The *EPSA* decision construes the non-sale of power participating as demand-reduction resources in wholesale markets, which is a different technology in the pre-existing wholesale market.¹²¹ The *EPSA* decision determines on which side of the traditional wholesale/retail "bright line" this technology competes and fits for purposes of regulation, but it does not change the line regarding jurisdiction over federal wholesale power sale authority.¹²² The Court in *EPSA* found that federal authority could include regulation of demand response when it is part of a wholesale market and any practice affecting rates where the aim of state regulation encroaches onto FERC's exclusive purview.¹²³

FERC proactively fostered greater wholesale competition in a series of rulings. 124 FERC has issues several orders which do this. FERC Order 888 provides the legal foundation for non-discriminatory open access transmission service offered by all U.S. wholesale electric utilities. All regulated public wholesale utilities in the lower 48 states, excluding Texas, which own, control or operate jurisdictional transmission facilities are required to maintain open access transmission tariffs that comply with the

¹¹⁹ See generally Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288 (2016).

¹²⁰ Elec. Power Supply, 136 S. Ct. at 776 (citations omitted).

¹²¹ See id. at 768-71.

¹²² See id. at 767-68.

¹²³ *Id.* at 774–76.

¹²⁴ See supra notes 113–123; see also infra 125–133.

FERC-mandated *pro forma* open access transmission tariff. This FERC Order 888 *pro forma* transmission tariff requires that the utility transmission provider plan and construct necessary additional transmission facilities so that the provider is able to serve network customers "on a basis comparable to the Transmission Provider's delivery of its own generating and purchased resources to its Native Load Customers." ¹²⁵

FERC next promulgated its revised *pro forma* OATT in Order 888-A which provides that each incumbent customer may exercise a right-of-first-refusal (ROFR) to match the duration offered by a new customer at a full open access transmission tariff (OATT) rate. Non-public utilities may have "reciprocity" open access transmission tariffs. 127

In FERC Order 890,¹²⁸ FERC's amendments to the Order 888 *pro forma* tariff require transmission providers to plan for the needs of all their customers on a comparable basis to how the provider plans for its own needs.¹²⁹ FERC Orders 890 and 890-A mandated coordinated, open and transparent transmission planning on a local and regional level by transmission providers, as initiated by FERC Order 888.¹³⁰ Later, in Order

¹²⁵ Preventing Undue Discrimination and Preference in Transmission Service, 72 Fed. Reg. 12266, 12521 (Mar. 15, 2007) (to be codified at 18 C.F.R. pts 35, 37).

¹²⁶ Idaho Power Co. v. FERC, 312 F.3d 454, 457 (D.C. Cir. 2003); see also Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, 62 Fed. Reg. 12274, 12274 (Mar. 14, 1997) (to be codified at 18 C.F.R. pt. 35). FERC ordered Idaho Power Co. to continue to supply power to an incumbent customer at the end of its contract term even though a merchant customer had offered more attractive contract term. Idaho Power Co., 312 F.3d at 457–58. The Court of Appeals reversed the FERC Order and held that an incumbent must match a new potential customer's superior offer. Id. at 463–65. A right of first refusal is a right to match the terms of a third party's highest offer. Id. at 456–57.

¹²⁷18 C.F.R. § 35.28(a), (e) (2016). "Reciprocity" provides a so-called safe harbor, ensuring that the non-public utility is entitled to transmission service from public entities. *Id*.

¹²⁸ Preventing Undue Discrimination and Preference in Transmission Service, 72 Fed. Reg. 12266 (Mar. 15, 2007) (to be codified at 18 C.F.R. pts. 35 and 37), *reh'g*, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), *reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *reh'g*, Order No. 890-C, 126 FERC ¶ 61,228 (2009).

¹²⁹N.Y. Reg'l Interconnect, Inc. v. FERC, 634 F.3d 581, 584 (D.C. Cir. 2011); Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, FERC Stats. & Regs. ¶ 31,241 (2007).

¹³⁰FERC explained that in light of a decline in investment relative to load growth resulting in increased congestion and a reduced access to alternative sources of energy, as well as a disincentive to remedy congestion on a non-unduly discriminatory basis, reform of the Order No. 888 and 888-A pro forma tariff was needed. The Commission identified nine planning principles

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2000,¹³¹ FERC promoted the development of Regional Transmission Organizations to form "competitive wholesale electric [] markets," which markets were required to incorporate non-discriminatory transmission service. ¹³³

FERC Order 764 modified traditional wholesale utility planning and administration in order to open the wholesale markets to renewable power. It did so by modifying the traditional hourly-scheduling of resources for transmission service to better correspond to intermittent renewable power needs. For example, wind power generators exhibit significant variation in generation output within an hour, due to wind speed changes. ¹³⁴ FERC

in Order No. 890 that must be satisfied for a transmission provider's planning process to be considered compliant with that order. These nine planning principles are:

- (1) Coordination-the process for consulting with transmission customers and neighboring transmission providers;
- (2) Openness-planning meetings must be open to all affected parties;
- (3) Transparency-access must be provided to the methodology, criteria, and processes used to develop transmission plans;
- (4) Information Exchange—the obligations of and methods for customers to submit data to transmission providers must be described;
- (5) Comparability-transmission plans must meet the specific service requests of transmission customers and otherwise treat similarly-situated customers (e.g., network and retail native load) comparably in transmission system planning;
- (6) Dispute Resolution-an alternative dispute resolution process to address both procedural and substantive planning issues must be included;
- (7) Regional Participation—there must be a process for coordinating with interconnected systems;
- (8) Economic Planning Studies-study procedures must be provided for economic upgrades to address congestion or the integration of new resources, both locally and regionally; and
- (9) Cost Allocation—a process must be included for allocating costs of new facilities that do not fit under existing rate structures, such as regional projects.

Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890-A, 121 FERC \P 61,297 (2007).

¹³¹Regional Transmission Organizations, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999), *order on reh'g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000), *petitions for review dismissed*, Pub. Util. Dist. No. 1 of Snohomish County, Washington v. FERC, 272 F.3d 607 (D.C. Cir. 2001).

¹³² Maine Pub. Utils. Comm'n v. FERC, 454 F.3d 278, 280–81 (D.C. Cir. 2006).

¹³³ See 18 C.F.R. § 35.34(k)(7) (2006).

¹³⁴Integration of Variable Energy Resources, Order No. 764, FERC Stats. & Regs. ¶ 61,246, at para. 22 (2012). Wind generator's plant factors on the Bonneville Power Administration system averaged 27.1%, but the generator, under the old standards, had to pay the peak level of transmission required to carry the generator's load. *See* Michael Dotten, *New Developments*

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Order 764 requires that every transmission customer be given the opportunity to adjust its schedule of the amount of transmission services in 15-minute intervals. The 18 CFR Part 35 amendment embodied in Order No. 764¹³⁶ demonstrate that FERC: "Changes in the generation mix and underlying public policies influencing investment in VER generation have accentuated the need to reform existing practices that unduly discriminate against VERs or otherwise impair the ability of public utility transmission providers and their customers to manage costs associated with VER integration effectively." ¹³⁷

The most recent major order change by FERC was Order 1000. It creates requirements for transmission system owners to perform regional and interregional transmission planning. Within exclusive FERC authority is approval of all regional transmission organizations (RTO) and Independent System Operator (ISO) terms of service and the actual financial tariffs charged to customers. FERC Order 1000 requires incumbent transmission providers, utilities, and the RTOs which manage regional multi-state transmission access to the grid, to eliminate stateenacted rights-of-first-refusal (ROFRs) from all wholesale transmission tariffs. 138 FERC Order 1000 expressed the agency's opinion regarding the difference between an obligation to build in one's transmission zone and a federal right of first refusal: "[W]e do not believe that [the] obligation [to build] is necessarily dependent on the incumbent transmission provider having a corresponding federal right of first refusal to prevent other entities from constructing and owning new transmission facilities located in that region."139

Integrating Wind and Solar Power into the Grid Power, MARTEN LAW (Apr. 14, 2014), http://www.martenlaw.com/newsletter/20140415-integrating-wind-solar-power-grid#_edn11.

¹³⁸ Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, FERC Stats. & Regs. ¶ 61,051, at paras. 7, 313 (July 21, 2011). For an excellent treatment of this, please see Rishi Garg, What's Best for the States: A Federally Imposed Competitive Solicitation Model or a Preference for the Incumbent? State Adoption of Right of First Refusal Statutes in Response to FERC Order 1000 and the Dormant Commerce Clause (Nat'l Reg. Res. Inst., Briefing Paper No. 13–04, 2013).

 $^{^{135}}$ Integration of Variable Energy Resources, Order No. 764, FERC Stats & Regs. \P 61,246, at paras. 2, 21, 97 (2012).

¹³⁶ See id. at paras. 11, 24 (2012).

¹³⁷*Id.* at para. 21.

 $^{^{139}}$ Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, FERC Stats. & Regs. \P 31,323, at para. 261 (2011).

All of these orders facilitated competitive independent renewable and other distributed generation to move power to all points in the grid without financial impediments. The *Hughes* opinion notes that "[o]ver the past few decades, many States, including Maryland, have deregulated their energy markets." The *Hughes* opinion notes that utilities "purchase that electricity . . . from independent power generators." The Court notes that the electricity market has evolved to become a "competitive interstate business, and FERC's role has evolved accordingly."

The majority opinion in *EPSA* held "[w]e afford great deference to the Commission in its rate decisions [,]" for "[t]he disputed question here involves both technical understanding and policy judgment." The 2016 *EPSA* opinion, indirectly, reinforces this interpretation that technology, not the basic contours of the Federal Power Act or the Constitution, has altered. Neither demand response nor conservation are the sales of energy; they are different technologies. This does not create a blurred or erased line of the division between state and federal government authority; it maintains the traditional "bright line," but includes additional non-sale technology transactions in demand response.

The Supreme Court in *United States v. Mead Corp.* acknowledged that *Chevron* recognizes that Congress can be found to have implicitly delegated discretionary authority to an administrative agency.¹⁴⁵ In *City of Arlington v. FCC*, the majority held that *Chevron* deference applies to an agency's interpretation of the scope of its own statutory jurisdiction: "statutory ambiguities will be resolved, within the bounds of reasonable interpretation,

¹⁴⁰Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288, 1292 (2016). In point of fact, it is more recent than "decades." The first deregulation occurred in Massachusetts and Rhode Island by legislation in 1997, and full implementation occurring thereafter. *See generally* STEVEN FERREY, THE NEW RULES: A GUIDE TO ELECTRIC MARKET REGULATION app. B (2000); FERREY, *supra* note 3, § 10:13.

¹⁴¹ Hughes, 136 S. Ct. at 1292.

¹⁴² Id. (quoting FERC v. Electric Power Supply Ass'n, 136 S. Ct. 760, 768 (2016)).

¹⁴³FERC v. Electric Power Supply Ass'n, 136 S. Ct. 760, 782, 784 (2016). The Supreme Court decision noted and endorsed Judge Edwards' dissent in the D.C. Circuit in *EPSA. Id.* at 773. In his dissent, Judge Edwards wrote that "[w]e . . . afford significant deference to FERC in light of the highly technical regulatory landscape that is its purview." Electric Power Supply Ass'n v. FERC, 753 F.3d 216, 236 (D.C. Cir. 2014) (Edwards, J., dissenting), *rev'd*, 136 S. Ct. 760 (2016).

¹⁴⁴ See generally Electric Power Supply Ass'n, 136 S. Ct. at 760–85.

¹⁴⁵533 U.S. 218, 228-29 (2001).

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not by the courts but by the administering agency." ¹⁴⁶ There is no difference between deference afforded to the agency by an agency's "jurisdictional" or "non-jurisdictional" interpretations: ¹⁴⁷ if "the agency's answer is based on a permissible construction of the statute" that is the end of the matter. ¹⁴⁸

A federal agency, and particularly independent utility regulatory agencies like the FCC and FERC, are now allowed to determine the bounds of its own authority, both substantively and procedurally. ¹⁴⁹ The non-sale of power, addressed by FERC Order 745, is within FERC authority to determine whether its authority over wholesale market transactions include such things as demand reduction transactions which affect these markets. ¹⁵⁰ In 2014, in a separate 6-2 opinion, the Supreme Court held that federal agencies are entitled to deference to agency discretion in devising regulations, as per Chevron. ¹⁵¹ This overruled a determination that federal rules did not defer sufficiently to state implementation. ¹⁵²

¹⁴⁶133 S. Ct. 1863, 1868 (2013). The Court noted that, under *Chevron*, the Court must first ask whether Congress directly spoke to the precise question at issue; if so, the Court must give effect to Congress's unambiguously expressed intent, and if "the statute is silent or ambiguous," the court must defer to the administering agency's construction of the statute so long as it is permissible. *Id.* (quoting Chevron U.S.A., Inc. v. Nat. Res. Def. Council, 467 U.S. 837, 842–43 (1984)). *See also* AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 397 (1999).

¹⁴⁷There is no exception that exists to the normal deferential standard of review for jurisdictional and legal questions. NLRB v. City Disposal Sys., Inc., 465 U.S. 822, 830 n.7 (1984). "[T]here is no principled basis for carving out an arbitrary subset of 'jurisdictional' questions from the *Chevron* framework." *City of Arlington*, 133 S. Ct. at 1865; *see*, *e.g.*, National Cable & Telecomms. Ass'n, Inc. v. Gulf Power Co., 534 U.S. 327, 333, 339 (2002).

¹⁴⁸ Chevron, 467 U.S. at 843 (1984) (giving "Chevron deference" to agencies' constructions of the scope of their own jurisdiction); *see City of Arlington*, 133 S. Ct. at 1870-71; *see also, e.g.*, United States v. Eurodif S. A., 555 U.S. 305, 316 n.7 (2009).

¹⁴⁹ City of Arlington, 133 S. Ct. at 1868.

¹⁵⁰ See Order No. 745, Final Rule on Demand Response Compensation in Organized Wholesale Energy Markets, 134 FERC ¶ 61,187 (Mar. 15, 2011).

¹⁵¹EPA v. EME Homer City Generation, L.P., 134 S. Ct. 1584, 1609–10 (2014).

¹⁵² *Id.* While employing a different mechanism than CAIR to address cross-state pollution, the D.C. Circuit found that it required some states to reduce emissions by more than what they contributed to downwind state pollution. EME Homer City Generation, L.P. v. EPA, 696 F.3d 7, 25 (D.C. Cir. 2012), *rev'd*, 134 S. Ct. 1584 (2014). Fifteen states sought review of CSAPR, while nine states intervened to support the rule. *Id.* at 9–10.

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3. The Changing Nature of Power Transactions Determines Regulation

How government controls technology, and ultimately the extent of federal executive branch power are changed by both the *Hughes* and *EPSA* decisions of the Court, and illustrate the diminishing role of the states in regulating the future of power. During the oil crises of the 1970s, Congress enacted the Public Utility Regulatory Policies Act of 1978 (PURPA), as an amendment to the Federal Power Act, to encourage "Qualifying Facilities" (QFs) which deployed cogeneration and small-scale power which used renewable or waste energy sources to generate power. The approximately 195 investor-owned utilities are required to purchase electricity from a QF at the utility's avoided cost and to interconnect with QFs at nondiscriminatory rates upon request of QFs. This set forth the move in America to competitive, independent self-generation of distributed generation. PURPA's constitutionality was upheld twice by the Supreme Court. The second state of the state of t

In the last four decades, the United States has reinvigorated the generation of independent power. The amount of power proceeding through a wholesale transaction before it eventually is sold at retail has increased to now constitute more than 50% of all new power annually installed, and increased by several hundred percent from only 5% in the 1960s to approaching a majority of all power sales at the current time. Wholesale power transactions are exclusively federally regulated.

Figure 1 shows the several Independent Service Organizations in the U.S. and their geographic placement. Approximately half of the U.S. is within an ISO. Each ISO is independently and exclusively in charge of all wholesale power sales and transactions. ISOs manage wholesale power, which is FERC jurisdictional, and their structure and actions are approved by FERC.

¹⁵⁴18 C.F.R. § 292.304(a)(2) (2016).

¹⁵³16 U.S.C. § 824a-3(a) (2012).

¹⁵⁵FERC v. Mississippi, 456 U.S. 742, 771 (1982); American Paper Inst., Inc. v. American Elec. Power Serv. Corp., 461 U.S. 402, 404 (1983).



Figure 1: U.S. ISOs

The Supreme Court noted during the 21st century that "[s]ince 1935, and especially beginning in the 1970's and 1980's, the number of electricity suppliers has increased dramatically." And with independent power producers proceeding through wholesale sales of their output, there is greater authority now exercised at the federal level, and less at the state level. Thirteen states have deregulated their retail power systems, and an additional seven states have partially deregulated systems, allowing competition in their power markets. Several of the thirteen deregulating states compelled their regulated electric utilities to divest their power generation facilities to the highest bidders in an effort to encourage competition. This forces utilities in these states to purchase their power

¹⁵⁶New York v. FERC, 535 U.S. 1, 7 (2002).

¹⁵⁷ See Map of Deregulated Energy States and Markets, ELECTRIC CHOICE, https://www.electricchoice.com/map-deregulated-energy-markets/ (last visited Mar. 16, 2017).

¹⁵⁸John Kwoka, et al. *Divestiture Policy and Operating Efficiency in U.S. Electric Power Distribution* 1, 29 (July 2008), *available at* https://www.repository.cam.ac.uk/bitstream/id/534 279/0835&eprg0819.pdf/;jsessionid=8ECCB5E6CD6F9E01D60A455E65368232. The paper establishes that 28 of the 73 electric utilities in the database underwent a major divestiture during

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back in a wholesale transaction, greatly increasing the number of wholesale transactions to be exclusively federally regulated.

In *EPSA*, the Court notes that the electricity market has evolved to become a "competitive interstate business, and FERC's role has evolved accordingly." In *Hughes*, the Court notes that "[o]ver the past few decades, many States, including Maryland, have deregulated their energy markets." This fundamentally changes how the commerce is regulated under the U.S. federalist system: A consequence of these energy market regulatory changes amid Federal Power Act preemption has been "a massive shift in regulatory jurisdiction from the states to FERC." State energy regulators, as a consequence, now can exercise much more limited authority over the energy transactions which occur. 162

In the United States, more new power generation capacity is constructed each year by non-utility independent power producers (IPPs) than by the regulated utilities.¹⁶³ As held by the federal court of appeals and affirmed by the Supreme Court:

Local utilities now obtain power largely through wholesale contracts subject to FERC's exclusive regulation, rather than through self-generated and self-transmitted power. . . .

... Although state regulators formerly took an extremely active role so as to ensure the just and reasonable retail

the sample period ending in 2003, while 45 of them did not. Of the 28 divesting utilities, eight involved mandatory divestitures, the remaining twenty were non-mandatory divestitures of power generation facilities. In this limited period, this represented 22% of all generation capacity in the U.S.).

¹⁶³ See Electric Energy Market Competition Task Force, Report to Congress on Competition In Wholesale And Retail Markets For Electric Energy 10 (YEAR) ("In the 1970s, vertically integrated utility companies (investor-owned, municipal, or cooperative) controlled over 95 percent of the electric generation in the United States . . . by 2004 electric utilities owned less than 60 percent of electric generating capacity. Increasingly, decisions affecting retail customers and electricity rates are split among federal, state, and new private, regional entities."); see also STEVEN FERREY, Sale of Electricity, THE LAW OF CLEAN ENERGY: EFFICIENCY AND RENEWABLES (Michael B. Gerrard ed., 2011).

¹⁵⁹FERC v. Electric Power Supply Ass'n, 136 S. Ct. 760, 768 (2016).

¹⁶⁰Hughes v. Talen, 136 S. Ct. 1288, 1292 (2016).

¹⁶¹ Public Util. Dist. No. 1 v. FERC, 471 F.3d 1053, 1066–67 (9th Cir. 2006), *aff'd in part and rev'd in part sub nom* Morgan Stanley Capital Grp., Inc. v. Pub. Util. Dist. No. 1, 554 U.S. 527, 544–55 (2008).

¹⁶² *Public Util. Dist. No. 1*, 471 F.3d at 1066–67; *see also* Entergy Nuclear Vt. Yankee, LLC v. Shumlin, 733 F.3d 393, 428 (2d Cir 2013).

power rates, FERC has exclusive jurisdiction over the wholesale rates that now drive the electric power market and, as a practical matter, largely determine the rates ultimately charged to the public.¹⁶⁴

All of the federal cases discussed in this article involve state regulatory action by states whose utilities are in the approximately half of the states that participate in ISOs:

- Maryland, ¹⁶⁵ New Jersey, ¹⁶⁶ and Ohio ¹⁶⁷ are in the PJM ISO;
- Minnesota and North Dakota,¹⁶⁸ and Michigan and Illinois,¹⁶⁹ are in the MISO ISO;
- Vermont¹⁷⁰ is in ISO-NE;
- California¹⁷¹ is in CAISO.

All are subject to exclusive federal regulation. Federal regulation divests state regulation.

III. CIRCUIT COURT SUPERSTRUCTURE UNDERGIRDING THE SUPREMACY CLAUSE

EPSA was decided slightly before *Hughes* and both are consistent in their holdings. The implications of *Hughes*, although officially concerning only Maryland, extend to all other states in two important regards. First, the Supreme Court reinforced the "bright line" of impermissible field

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 $^{^{164}}$ Public Util. Dist. No. 1, 471 F.3d at 1067; see also Entergy Nuclear Vt. Yankee, LLC, 733 F.3d at 428.

¹⁶⁵PPL EnergyPlus, LLC v. Nazarian, 974 F.Supp.2d 790, 815 (D. Md. 2013), *aff'd*, 753 F.3d at 475–76 (4th Cir. 2014).

¹⁶⁶PPL EnergyPlus, LLC v. Hanna, 977 F. Supp. 2d 372, 383, *aff'd*, 766 F.3d at 246 (3d Cir. 2014).

 $^{^{167}}$ Order Granting Complaint, Electric Power Supply Ass'n v. AEP Generation Res., Inc., 155 FERC ¶ 61,102, FERC Docket No. EL16-33-000, April 27, 2016. This matter involved the AEP Ohio affiliates.

¹⁶⁸ See North Dakota v. Heydinger, 15 F. Supp. 3d 891, 910–11 (D. Minn. 2014).

¹⁶⁹ See Illinois Commerce Comm'n v. FERC, 721 F.3d 764, 773–74 (7th Cir. 2013); MISO Transmission Owners v. FERC, 819 F.3d 329, 334 (7th Cir. 2016).

¹⁷⁰ See Mississippi Power & Light Co. v. Mississippi ex rel. Moore, 487 U.S. 354, 356 (1988).

 $^{^{171}}$ California Indep. Sys. Operator Corp., 128 FERC \P 61,103 at \P 61,501, 2009 FERC LEXIS 1590, 2009 FERC LEXIS 1590 (FERC 2009); Order on Petitions for Declaratory Order, In re: Cal. Pub. Util. Comm'n, S. Cal. Edison Co., Pac. Gas and Elec. Co., San Diego Gas & Elec. Co., FERC Docket Nos. EL10-64-000 & EL10-66-000 (July 15, 2010), 132 FERC \P 61,047 at \P 61,339 n. 98 (2010).

preemption. Second, there are other similar state enactments, which are impliedly prohibited by *Hughes*, which undergird this decision and have already been stricken as unconstitutional under the Supremacy Clause and the Federal Power Act by other federal circuit courts.

What is of note in the recent precedent that follow, is the consistent interpretation that numerous states have crossed the "bright line" prohibiting state regulation of energy. The *Hughes* matter in Maryland involved interfering with the operating mechanism of the PJM ISO; the New Jersey¹⁷² and Ohio¹⁷³ matters discussed below also are within the PJM ISO and similarly turn on interference with the ISO wholesale markets. The Minnesota state regulation struck by the Eighth Circuit is in MISO, ¹⁷⁴ the Vermont regulation struck by the Second Circuit is in ISO-NE, ¹⁷⁵ and the two Seventh Circuit decisions involve matters in MISO states. ¹⁷⁶

No recent circuits have held to the contrary. With determination affecting states rendered by or within approximately two-thirds of the federal circuit courts of appeal, this is more than an isolated phenomenon. It attests that states are taking unconstitutional actions not allowed by the Supremacy Clause and the Federal Power Act, are doing so repeatedly, and are being challenged, sanctioned, and their regulation prohibited. ¹⁷⁷

A. Third Circuit—Parallel Universe

1. The Regulatory Action

There was a second, very similar type of state energy regulation, at the same time as the Maryland regulation in *Hughes*, in a different state inside

¹⁷² See PPL EnergyPlus, LLC v. Hanna, 977 F. Supp. 2d 372, 379, aff'd, PPL EnergyPlus, LLC v. Solomon,766 F.3d at 246 (3d Cir. 2014).

¹⁷³ See Order Granting Complaint, Electric Power Supply Ass'n. v. AEP Generation Res., Inc., 155 FERC ¶ 61,102, ¶ 61,658-59, FERC Docket No. EL16-33-000, April 27, 2016. This matter involved the AEP Ohio affiliates.

¹⁷⁴ See North Dakota v. Heydinger, 15 F. Supp. 3d 891, 917 (D. Minn. 2014).

¹⁷⁵ See Mississippi Power & Light Co., 487 U.S. at 385.

¹⁷⁶ See Illinois Commerce Comm'n v. FERC, 721 F.3d 764, 773–74 (7th Cir. 2013); MISO Transmission Owners v. FERC, 819 F.3d 329, 334 (7th Cir. 2016).

¹⁷⁷ See Order on Petitions for Declaratory Order, In re: Cal. Pub. Util. Comm'n, S. Cal. Edison Co., Pac. Gas and Elec. Co., San Diego Gas & Elec. Co., FERC Dockets Nos. EL10-64-000 & EL10-66-000 (July 15, 2010), 132 FERC ¶ 61,047 (FERC) ¶ 61,338 (2010) (discussing how states have been ordered to pay challengers' attorney fees, which have run well into seven figures per level of court or appeal).

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the PJM ISO. Parallel to the program in Maryland, and similarly contingent on in-state situs requirements for new IPP power generation capacity which was later overturned by the Supreme Court in 2016 as unconstitutional and preempted, New Jersey had a similar program with a different name.

New Jersey enacted a CfD scheme, known as its Long-Term Capacity Pilot Project (LCAPP). It was a subsidy program with 'contracts for differences,' to cause in-state utilities to acquire the significant energy output of 2,000 Mw of new IPP unregulated in-state-sited power projects. Having selected certain new in-state IPP energy generation projects, New Jersey's LCAPP program provided them additional financial compensation after required them to obtain capacity payments through clearing (winning) compensation through the PJM capacity auction. Six hundred eighty Mw of additional IPP generation participating in the LCAPP program.

The costs of LCAPP were passed on to captive New Jersey ratepayers, when the New Jersey Board of Public Utilities, the state energy regulatory agency, entered standard offer capacity agreements ("SOCAs"), which were fifteen-year contracts guaranteeing these selected new IPP companies a preagreed fixed price for their capacity and power. In essence, New Jersey financially 'topped off' with state ratepayer funds its selected wholesale market IPPs, contingent on them clearing (winning) the federally[-]approved PJM capacity auction, thus tilting slightly the competitive wholesale market with these state subsidies.

The New Jersey Board of Public Utilities, the energy regulatory authority in the state, crafted a set of contracts, called Standard Offer Capacity Agreements that assured certain electric energy generators fifteen years of a fixed revenue flow from local utilities and, ultimately, New Jersey ratepayers. In both New Jersey as well as Maryland, the state regulatory commission would have the retail utilities pay the difference between revenue received from the PJM competitive wholesale market and a price set by the state regulatory agency. This 'true up' to a set fixed price determined unilaterally by the state entirely outside the wholesale market established by PJM and FERC, with financial assurance reconciled.

2. The Court Decision

The New Jersey case contesting this scheme raised field preemption and conflict preemption of the New Jersey LCAPP CfD proposal, ¹⁷⁸ where a

¹⁷⁸PPL EnergyPlus, LLC v. Hanna, 977 F. Supp. 2d 372, 406–07 (D.N.J. 2013).

fixed price for select New Jersey generators allows such generation effectively to bid below the true cost of new entry for the regional multistate FERC-approved PJM auction, and thereby obstructs the federal goal of a competitive auction without selective subsidies for capacity resources. This was alleged to obstruct the federal goal of a competitive auction without selective subsidies for capacity resources. 180

This state subsidy would result in the regional PJM guaranteeing these selected New Jersey facilities a substantial perpetual capacity payment passed on both to New Jersey ratepayers and to all PJM ratepayers in the 13 PJM states and Washington, D.C. It was charged that this artificially influenced the New Jersey new generation units to underbid and drive down the clearing price at the PJM annual capacity auction for all participants.

New Jersey defended its program asserting that the LCAPP was only a planning measure, with only incidental effect on F.E.R.C. authority. ¹⁸¹ New Jersey contended that F.E.R.C.'s review and oversight authority is 'limited to sales of the actual physical electricity (or capacity) to a buyer' and '[c]ontracts that do not effect a physical sale of electricity... are not subject to [Commission] jurisdiction.' ¹⁸² The trial decision by the New Jersey federal trial court held that the state program impermissibly regulated wholesale energy prices to promote the construction of new generation facilities located only in New Jersey. The LCAPP was held to: "intrude[s] upon the exclusive jurisdiction of the Commission, by establishing the price that LCAPP generators will receive for their sales of capacity. The Court finds that in doing so, the LCAPP 'places a direct burden upon interstate commerce' within the meaning of the Attleboro decision. Accordingly, the LCAPP Act invades the field occupied by Congress and is preempted by the Federal Power Act." ¹⁸³

The court held that conflict preemption prevents even indirect state regulation of the wholesale price for energy. A state government-imposed

¹⁷⁹N.J. STAT. ANN. TIT. 48, § 48:3-98.3c(1) (2017). After the New Jersey BPU selects a generator program, they enter into a standard offer capacity agreements (SOCA) with the BPU, which obligates the generator to produce a fixed amount of electricity that is sold to New Jersey retail utilities in return for a fixed price for the power.

¹⁸⁰PPL EnergyPlus, LLC v. Solomon, 766 F.3d 241, 255 (3d Cir. 2014).

¹⁸¹ See N.E. Hub Partners, L.P. v. CNH Transmission Corp., 239 F.3d 333 (3d Cir. 2001) (a state regulatory process was field preempted where the result of such process was within federal authority).

¹⁸² Hanna, 977 F. Supp. 2d at 406.

¹⁸³ *Id.* at 409.

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price adder interferes with F.E.R.C.'s market tariff governing the wholesale sale of electricity in interstate commerce, and intrudes upon the federal Commission's authority to set wholesale energy prices through its preferred regional RPM auction process. 184

The U.S. Court of Appeals for the Third Circuit agreed that state CfDs for selected in-state facilities were preempted by the Federal Power Act, based on field preemption analysis. ¹⁸⁵ It did not bother to speak to the issue of conflict preemption: "because we determine that LCAPP has been field preempted, we do not reach the conflict preemption and dormant Commerce Clause arguments raised by the parties." The trial court determined that the state regulation of New Jersey was both field preempted and conflict preempted. The Third Circuit upheld the trial opinion, but held that since the state program was field preempted, there was no need to reach the conflict preemption issue, because they both equally resulted in a determination of preemption of the state program that made it unenforceable. ¹⁸⁸

F.E.R.C.'s jurisdiction over interstate wholesale rates is exclusive. ¹⁸⁹ Accordingly, F.E.R.C. alone has the responsibility to "ensure that wholesale rates are 'just and reasonable.'" ¹⁹⁰ Nothing changes if states argue that their orders or approved mechanisms are only indirect, and "do[] not formally upset the terms of a federal transaction is no defense [for the state], since the functional results are precisely the same." ¹⁹¹ The Court of Appeals held:

This agency, known as FERC, "regulates the sale of electricity at wholesale in interstate commerce." FERC's jurisdiction over interstate wholesale rates is exclusive.

¹⁸⁴ *Id.* at 410–11, citing Felder v. Casey, 487 U.S. 131, 138 (1988) (quoting Free v. Bland, 369 U.S. 663, 666 (1962)), and Gade v. Nat'l Solid Wastes Mgmt. Ass'n, 505 U.S. 88, 108 (1992) ("[E]ven state regulation designed to protect vital state interests must give way to paramount federal legislation" (quoting *De Canas v. Bica*, 424 U.S. 351, 357 (1976)).

¹⁸⁵PPL EnergyPlus, LLC v. Solomon, 766 F.3d at 241, 253 (3d Cir. 2014). This decision was written after the Fourth Circuit's decision in *Nazarian* and cites that opinion.

¹⁸⁶ Id. at 254.

¹⁸⁷ Id. at 246.

¹⁸⁸Id. at 246.

¹⁸⁹ Nantahala Power & Light Co. v. Thornburg, 476 U.S. 953, 966 (1986).

¹⁹⁰Entergy La., Inc. v. Louisiana PSC, 539 U.S. 39, at 41; 16 U.S.C. § 824d(a) (2017).

¹⁹¹ *Solomon*, 766 F.3d at 254 (citing PPL EnergyPlus v. Nazarian, 753 F.3d 467, 477 (4th Cir. 2014)).

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Accordingly, FERC alone has the responsibility to "ensure that wholesale rates are just and reasonable." ¹⁹²

This case went no further, when the very slightly earlier, and very similar, Fourth Circuit decision was granted *certiorari*. However, the Supreme Court decision in *Hughes* references the *Solomon* case expressly, and upholds and essentially endorses its conclusions. ¹⁹³

3. Parallel Universes

A similar determination of unconstitutionality of state energy regulation based on the Supremacy Clause was reached by the Third Circuit on similar facts of state regulation of location, confronting the Fourth Circuit and the Supreme Court. Notwithstanding similarities of the New Jersey and Maryland programs, the New Jersey federal court disavowed any need to compare the two programs. However, the two state regulations are closely similar in required in-state/geographic location, regulatory compulsion for regulated utilities in the state to enter mandatory contracts to purchase wholesale power through contracts for differences as a subsidy mechanism above wholesale market prices, theoretically lowering the market-clearing capacity prices and extracting most of the compensation for in-state power production from the regional 13-state PJM market and their ratepayers, and restricting competition in the PJM capacity market and tilting the competitive PJM auction. However, the Third Circuit on similar facts of the New Jersey and the New Jersey and

The two separate federal district courts in Maryland and New Jersey came to the almost identical conclusion that these laws clearly violated the Supremacy Clause, but not the dormant Commerce Clause. ¹⁹⁷ The Third Circuit and Fourth Circuit agreed that this was field preemption, with the Fourth Circuit also finding conflict preemption of the state regulation. ¹⁹⁸ The Supreme Court in *Hughes* notes that New Jersey has "a similar

¹⁹⁷ Id. at 412; Solomon, 766 F.3d at 246.

¹⁹² *Id.* at 247 (citing *Entergy La., Inc.*, 539 U.S. at 41; *Nantahala*, 476 U.S. at 966; 16 U.S.C. § 824d(a) (2017)).

¹⁹³ Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. at 1296 (2016).

¹⁹⁴ Solomon, 766 F.3d at 246.

¹⁹⁵ Hanna, 977 F. Supp. 2d at 404 (2013) (Court is not able to discern whether Maryland's proposal is sufficiently similar to the LCAPP).

¹⁹⁶Id

¹⁹⁸ Hughes, 136 S. Ct. at 1292, 1296 n. 8.

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program implemented around the same time." Therefore, the *Hughes* decision was not distinguished by the Supreme Court and impliedly also preempted.

As of 2016, ISOs and RTOs, such as PJM, manage the majority of the U.S. transmission grids.²⁰⁰ The ISOs control which generation units are allowed to operate at any particular time,²⁰¹ and determine the price of that power based on the last and highest unit of electricity purchased at any given block of time.²⁰² Any electricity in an ISO can move instantaneously across state boundaries in interstate commerce to satisfy demand.²⁰³

New Jersey, as well as Maryland,²⁰⁴ had elected to have its regulated utilities participate as a member of the federally–regulated regionally integrated wholesale power market, PJM.²⁰⁵ There is nothing which requires a state to participate in an interstate ISO, nor to mandate that state utilities divest their power generation facilities and instead purchase their power in the interstate wholesale market. Any state can take its regulated retail utilities out of an interstate ISO.²⁰⁶

The Supreme Court held that the law "allows any State regulator to prohibit its consumers from making demand response bids in the wholesale market." ²⁰⁷

For either New Jersey or Maryland, their state energy regulatory commissions could have elected a different regulated structure and thereafter imposed requirements as to its utilities' location and operation of in-state power generation facilities that suited state policy. However, for those states that choose to participate in PJM interstate wholesale power markets, they are exclusively subordinate to FERC interstate and wholesale

¹⁹⁹ Id. at 1295, n. 4.

 $^{^{200}} FERC\ v.$ Electric Power Supply Ass'n, 136 S. Ct. 760, 768 (2016); North Dakota v. Heydinger, 825 F.3d 912, 914–15 (2016).

²⁰¹ Heydinger, 825 F.3d at 915.

²⁰² Electric Power Supply Ass 'n., 136 S. Ct. at 768.

²⁰³New York v. FERC, 535 U.S. 1, 7 (2002).

²⁰⁴ See PPL EnergyPlus, LLC v. Hanna, 977 F. Supp. 2d 372, 377 (D.N.J. 2013), aff'd, PPL EnergyPlus, LLC v. Solomon, 766 F.3d 241, 246 (3d Cir. 2014); PPL EnergyPlus, LLC v. Nazarian, 974 F. Supp. 2d 790, 790 (D. Md. 2013); aff'd, 753 F.3d 467 (4th Cir. 2014).

²⁰⁵ Who We Are, http://www.pjm.com/about-pjm/who-we-are.aspx (last visited Mar. 15, 2017).

²⁰⁶ See Steven Ferrey, The Double Helix of Supremacy and Commerce Clause Constitutional Restraints Encircling the New Energy Frontier, 7 Nw. Interdisc. L. Rev. 1, 28 (2014).

²⁰⁷FERC v. Electric Power Supply Ass'n, 136 S. Ct. 760, 779 (2016).

power jurisdiction, and state policy and direct and indirect tariffs are preempted. 208

The Maryland matter, which was the subject of *Hughes*, involved PJM and its wholesale power market.²⁰⁹ New Jersey, a state also in the PJM ISO system, enacted a statute similar to that of Maryland before the Supreme Court *Hughes* decision in 2016.²¹⁰ The federal district court in New Jersey and the Third Circuit decided this matter, and are expressly referenced in the *Hughes* Supreme Court opinion.²¹¹ This Third Circuit New Jersey decision was written after the Fourth Circuit's decision in *Nazarian* (which was retitled *Hughes* in the Supreme Court appeal because of a change of Maryland regulatory personnel), and cites that Fourth Circuit opinion.²¹² The first circuit court opinion, in the Fourth Circuit, was granted *certiorari*.

B. Eighth Circuit – Interactive Supremacy and Commerce Clauses

1. The State Law

North Dakota challenged the constitutionality of a Minnesota statute which was enacted to restrict the importation of coal-fired power to Minnesota. The 2007 Minnesota statute regulated emissions from power plants, exempting those in Minnesota. Rather, the state decided to extend its reach beyond its borders by regulating emissions from power plants that import electricity into the regional mid-American grid. 214

This 2007 wide-ranging energy reform legislation, known as the Next Generation Energy Act (NGEA), "requires state agencies to craft a plan for reducing the State's greenhouse gas emissions by 80 percent." "If the State fails to adopt a plan, the NGEA then prohibits any 'person' from: (1) constructing a "new large energy facility" in Minnesota that would contribute to statewide power sector carbon dioxide emissions; (2)

²⁰⁹ Hughes v. Talen Energy Mktg., LLC 136 S. Ct. 1288, 1293 (2016).

 $^{^{208}}$ *Id*.

²¹⁰Id. at 1295.

²¹¹ Id. at 1296.

²¹²PPL EnergyPlus v. Solomon, 766 F.3d 241, 253 (3d Cir. 2014).

²¹³North Dakota v. Heydinger, 15 F. Supp. 3d 891, 895 (D.Minn. 2014).

²¹⁴ Id. at 908–09.

²¹⁵See Minnesota: Commerce Clause and Supremacy Clause Challenge to State Law Limiting Coal Power, STATE POWER PROJECT, https://statepowerproject.org/minnesota/ (last visited April 3, 2017).

'import[ing] or commit[ting] to import' power from a new large energy facility that would contribute to statewide power sector carbon dioxide emissions; or (3) entering into a new long-term power purchase agreement that would increase statewide power sector carbon dioxide emissions, unless the project developer offset its emissions to the satisfaction of the [state public utility commission] (PUC)."216 "The NGEA includes exemptions for specific facilities, and excludes natural gas fired plants from the definition of an affected 'new large energy facility."217

2. The Trial Court

In its claim, North Dakota alleged that the Minnesota statute interfered with electric interstate transmission and wholesale marketing in the integrated interstate Midwest region.²¹⁸ In the MISO grid, electrons flow freely without regard to state borders, entirely under MISO's federally approved control:

[A] person who "imports" electricity does not know the origin of the electrons it receives, whether or not the transaction is pursuant to a long-term purchase agreement with an out-of-state generator. As a State expert described the energy market, the "contract path" between the importer and generator "represents a flow of dollars, not a flow of electrons." ²¹⁹

The federal trial court found the statute was in violation of the Constitution's dormant Commerce Clause because 'the practical effect' of the provisions was to control non-Minnesota entities and thus violated the sparingly construed the extraterritoriality doctrine of the Commerce Clause." The initial court granted plaintiffs' motions for summary judgment because parts of the Minnesota statute regulated extraterritorially in violation of the dormant Commerce Clause. The court made particular note that electricity is different than other commodities: noting this interstate movement of electricity, the trial court held that there were two constitutional problems with the Minnesota statute. First, the statute

²¹⁷ *Id*.

 $^{^{216}}$ *Id*.

²¹⁸ Heydinger, 15 F. Supp. 3d at 910.

²¹⁹North Dakota v. Heydinger, 825 F.3d 912, 921 (2016).

²²⁰*Heydinger*, 15 F. Supp. 3d at 909.

prohibits any "person" from importing energy from a new coal-fired facility into Minnesota. Second, a provision in the statute allows new long-term power sale contracts that would increase Minnesota's carbon emissions only if the project proponent offsets the emissions to the satisfaction of Minnesota regulators. Minnesota's regulation violated the dormant Commerce Clause. 223

There was also a claim by the challengers that the provisions are preempted by both the Federal Power Act and Clean Air Act. Because it found that the statute violated the Commerce Clause, the trial court did not need to reach the preemption claims. There were a variety of procedural barriers including lack of standing, 224 ripeness of the action, 225 and abstention 226 unsuccessfully raised by Minnesota in trying to prevent a court from reaching the constitutionality of its statute. Minnesota sought to eject the case procedurally from federal court adjudication, rather than only defend it on the merits.

3. The Eighth Circuit Opinion

The Commerce Clause of the Constitution establishes federal commerce authority for federal regulation, which then under the Supremacy Clause, preempts any (field), or conflicting (conflict), state regulation. The Commerce Clause is the basis of the Federal Power Act²²⁷ that establishes exclusive FERC regulation of interstate and wholesale power transactions. The Eighth Circuit opinion illustrates how one clause interacts legally with the other on appeal.

The opinion of the Eighth Circuit, as did the trial court, distinguishes the flow of electricity as unique, and apart from other energy sources, and distinguishes this holding from that in *Rocky Mountain Farmers Union v. Corey*, 730 F.3d 1070 (9th Cir. 2013), *cert denied*, 134 S. Ct. 2875 (2014)

²²¹ Heydinger, 825 F.3d at 913. Consequently, a coal-fired generator injecting energy into the regional MISO grid, regardless of the facility's location, could be importing energy into Minnesota in violation of the Minnesota statute.

²²²Id. The law thus requires non-Minnesota generators to seek Minnesota's approval before entering into a transaction to move power into the state.

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²²⁴ Heydinger, 15 F. Supp. 3d at 905.

²²⁵Heydinger, 825 F.3d at 917-18.

²²⁶Id. at 918.

²²⁷16 U.S.C. § 797(e) (2002) ("... Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States").

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(liquid ethanol fuel). ²²⁸ The opinion of the first judge on the Eighth Circuit panel affirmed the district court opinion that held that the challenged prohibitions have the practical effect of controlling conduct beyond the boundaries of Minnesota. ²²⁹ That trial court decision also held that the statute has extraterritorial reach which will impose Minnesota's policy, increasing the cost of electricity by restricting out-of-state coal sources of power supply, and interferes with the federally-approved MISO transmission system. ²³⁰

On appeal by Minnesota, two of three judges on the Eighth Circuit panel chose to look more deeply at the range of claims pled by plaintiffs and not reached by the trial court, regarding other constitutional challenges. The other major substantive claims of plaintiffs not reached by the trial court were preemption of the Minnesota statute by either the Clean Air Act or by the Federal Power Act. Two of these judges found that the Minnesota statute violated the Supremacy Clause of the Constitution and was preempted. One judge on the Eighth Circuit panel wrote the primary decision, and the two other judges chose to write independent concurring opinions, all concluding and agreeing that the Minnesota statute was unconstitutional and concurring with the trial court opinion striking the statute on constitutional grounds.

What made this Eighth Circuit opinion somewhat unique is the constitutional grounds that each judge chose to select in his or her individual opinion deciding the matter. Nonetheless, each judge concurred with and upheld the trial court decision that the statute was unconstitutional. Each opinion featured different constitutional violations by the state:

- The lead opinion for the panel authored by Judge Loken, declares that the Minnesota statute violates the dormant Commerce Clause by regulating purely "extraterritorial" economic activity—consistent with the finding of the trial court which it affirmed in the entirety, including the award of attorneys' fees for plaintiffs to be paid by the state. 231
- Judge Murphy's first concurrence disagreed with Judge Loken's conclusion that the statute violates the dormant Commerce Clause extraterritoriality provision, but joined the judgment

²²⁸ Heydinger, 825 F.3d at 921-22, n.6.

²²⁹ *Id.* at 922.

²³⁰Id. at 917.

²³¹ Id. at 913–14, 923.

because she concluded that the statute is preempted by the Federal Power Act, which grants the federal government exclusive authority over all terms for all wholesale sales of power. ²³² This is consistent with the *Hughes* Supreme Court opinion.

• Judge Colloton, in the other concurrence, agreed with Judge Murphy that the statute does not violate the dormant clause, but also concurred in the judgment to the extent that the Minnesota "statute bans wholesale sales of electric energy in interstate commerce," and therefore is preempted by the Federal Power Act. 233 Judge Colloton, however, does not believe that the Minnesota statute constitutes a complete ban on wholesale sales of energy that increase CO₂ emissions. However, Judge Colloton concluded that to the extent that the statute is not totally preempted by the Federal Power Act, it is wholly preempted by the federal Clean Air Act. 234

So, while all three judges agreed that the statute was unconstitutional and should remain stricken, their constitutional bases varied. The primary opinion of Judge Loken looked first at the appeal of the determination of the trial court of a Commerce Clause violation, and followed what was decided by that trial court, and did not reach any other claims. ²³⁵ He reasoned that because a non-Minnesota generator cannot assure that none of his generated electrons flow to Minnesota through the MISO grid as part of a contract with a non-Minnesota customer, the Minnesota state statute regulates transactions taking place wholly outside of Minnesota. Judge Loken did not address either of the preemption arguments that also were not addressed by the trial decision on appeal. Judge Loken's opinion notes that states retain "most matters they had traditionally regulated, including local electricity utility rates and the siting of power plants"²³⁶

Judge Murphy found convincing the submission of certain engineering experts in the matter. She noted that "[i]n the electricity transmission system, individual electrons do not actually 'flow' in the same sense as water flows in a pipe. Rather, the electrons oscillate in place, and it is

²³⁶*Id.* at 914 (citations omitted).

²³²Id. at 923 (Murphy, J., concurring).

²³³ Id. at 928 (Colloton, J., concurring).

²³⁴*Id.* (Colloton, J., concurring).

²³⁵*Id.* at 913–14.

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electric energy which is transmitted through [tapping in to the] electromagnetic wave" created in the power lines by electric power generators causing the electrons to oscillate.²³⁷

Judge Murphy shifts to her determination that the statute is preempted by the Federal Power Act, which the judge finds a much easier analysis. ²³⁸ Citing the new *EPSA* decision of the Supreme Court, the Eighth Circuit noted that federal law "leaves no room either for direct state regulation of the prices of interstate wholesales' or for regulation that 'would indirectly achieve the same result.'" There is exclusive jurisdiction at the federal level because "the price of capacity in indisputably a matter within the Commission's exclusive jurisdiction." She ruled that "[t]hat act gives the Federal Energy Regulatory Commission exclusive jurisdiction to regulate wholesale sales and the transmission of electric energy in interstate commerce." This opinion by Judge Murphy is an endorsement of field preemption of state authority under the Federal Power Act.

Judge Colloton sought to work up from what he deemed non-constitutional claims before reaching the Commerce Clause claim, and stop if he determined that the statute was preempted.²⁴² He considered preemption as a statutory claim that should be decided first, rather than before a constitutional claim.²⁴³ He articulated that the case law dictates that circuit courts should not address the Commerce Clause constitutional issue if federal preemption is found.²⁴⁴ Judge Colloton found the Minnesota statute doubly preempted by two federal statutes including the Federal Power Act.²⁴⁵

In essence, the two judges who found preemption, stopped their decisions at that point, since there is no difference in outcome striking and enjoining the statute if the statute violates two constitutional clauses instead

²³⁷ Id. at 924.

²³⁸ Id. at 926 (Murphy, J., concurring) (citing New York v. FERC, 535 U.S. 1, 6-7 (2002)).

²³⁹ *Id.* (quoting FERC v. Electric Power Supply Ass'n, 136 S. Ct. 760 at 780).

²⁴⁰*Id.* at 927 (citing New England Power Generators Ass'n, Inc. v. FERC, 757 F.3d 283, 290 (D.C. Cir. 2014); Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288 (2016)).

²⁴¹ *Id.* at 923 (Murphy, J., concurring).

²⁴²Id. at 927 (Colloton, J., concurring).

²⁴³*Id.* (Colloton, J., concurring). (citing Douglas v. Seacoast Prods., Inc.,431 U.S. 265, 271–272 (1977); *accord* Arizona Dream Act Coalition v. Brewer, 818 F.3d 901, 913–14 (9th Cir.2016)).

²⁴⁴*Id.* (Colloton, J., concurring).

²⁴⁵Id. at 928 (Colloton, J. concurring).

of one. Judge Loken did the opposite, starting with the dormant Commerce Clause, and once found, stopping there. Judge Loken did not disagree that there was preemption, but did not reach a decision expressed on preemption because he considered first the decision of the trial court that there was a Commerce Clause violation, and once upheld, the latter concern about preemption not addressed by the trial court therefore was not addressed by Judge Loken. So where one starts influences not where, but how, one arrives at a determination of unconstitutionality.

There are three opinions differing on which clause of the Constitution are violated by the Minnesota statute, but all agreeing and concurring that the Constitution was violated. This decision quotes, and although construing a different electric power issue, is consistent with, the *Hughes* decision issued at essentially the same time by the Supreme Court and the unanimous decision rendered by Judge Posner for the Seventh Circuit.²⁴⁶ The Eighth Circuit eventually upheld the trial court's award of attorney fees to plaintiffs, to be paid by the state that enacted the unconstitutional statute which posed injury to the plaintiffs, and dismissed the state's appeal of this issue as moot.²⁴⁷

C. Second Circuit—Power Preemption

Not all state regulations fit the exact mold of the Maryland and New Jersey regulation specifically addressed by the Supreme Court in *Hughes*. However, the fundamental jurisprudential principle of the extent of implied field preemption of state regulation directly or indirectly of wholesale power prices, is reflected in a decision of the Second Circuit.²⁴⁸ Approximately contemporaneously with the Maryland and New Jersey complaints, Vermont was challenged as to its attempt to regulate the ongoing permissions to operate of already-licensed independent power producers located in the state, and selling their power wholesale in interstate commerce. Vermont sought by statute and regulation to deny the continuing license of a 40-year-old existing IPP power generation facility, owned and operated by an out-of-state independent power generation company.²⁴⁹

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²⁴⁶ See Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288, 1290 (2016); Illinois Commerce Comm'n v. FERC, 721 F.3d 764, 776 (7th Cir. 2013).

²⁴⁷ Heydinger, 825 F.3d at 923.

²⁴⁸ See Entergy Nuclear Vt. Yankee, LLC v. Shumlin, 838 F. Supp. 2d 183, 218 (D. Vt. 2012), aff'd, 733 F.3d 393 (2d Cir. 2013).

²⁴⁹ *Id.* at 190.

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"[J]udges must focus only on an agency's contemporaneous explanations for its actions in evaluating rationality."²⁵⁰ In the Vermont energy regulatory matter, the federal trial court held that Vermont violated the Supremacy Clause by two different aspects of it[s] regulation of an existing IPP power generation; although in yet a third regard one of the preemption claims was not yet ripe."²⁵¹ Again here, any state is not permitted under the Federal Power Act and the Supremacy Clause to directly or indirectly influence sale of power in wholesale interstate transactions.²⁵²

Here, the federal trial court reinforced that the Federal Power Act exclusively grants F.E.R.C. "exclusive authority to regulate the transmission and sale at wholesale of electric energy in interstate commerce, and struck state regulation as unconstitutional." The Vermont federal trial court decision held:

Under the Federal Power Act, 16 U.S.C. § 791a et seq.:

Congress has drawn a bright line between state and federal authority in the setting of wholesale rates and in the regulation of agreements that affect wholesale rates. States may not regulate in areas where FERC has properly exercised its jurisdiction to determine just and reasonable wholesale rates or to insure that agreements affecting wholesale rates are reasonable.

...[A] state "must... 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."

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²⁵⁰Sharon B. Jacobs, *Energy Deference*, 40 HARV. ENVTL. L. REV. F. 49, 55 n. 41 (2016) (citing SEC v. Chenery Corp., 318 U.S. 80, 87 (1943)).

²⁵¹Entergy Nuclear Vt. Yankee, LLC v. Shumlin, 838 F. Supp. 2d 183, 224 (D. Vt. 2012).

²⁵²See id. at 236 ("[S]tates are '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 because they are needed by the people of the State... [a] 'protectionist regulation' violating the Commerce Clause (quoting New England Power Co. v. New Hampshire, 455 U.S. 331, 338–39 (1982)).

²⁵³New England Power Co. v. New Hampshire, 455 U.S. 331, 340 (1982); *see also* 16 U.S.C. § 824(b)(1).

Under the 'filed-rate doctrine,' state courts and regulatory agencies are preempted by federal law from requiring the payment of rates other than the federal filed rate. ²⁵⁴

Of particularly relevant note, this Vermont decision builds on the foundation of the Supreme Court Supremacy Clause decisions in *Mississippi Power* and *Nantahala*, which also are the key field preemption foundations employed by the Supreme Court in the 2016 *Hughes* decision. These articulate the "filed rate doctrine" and carve the "bright line" between federal and state jurisdictional power over electric energy in the United States. Therefore, the *Hughes* decision indirectly ratifies the "bright line" preemption doctrine applied by the Vermont federal court opinion and the subsequent Second Circuit affirmation of the Vermont trial court.

On appeal, the Second Circuit concurred that it was ripe to find the Vermont statute preempted on one of the three federal claims, and struck the statute as unconstitutional.²⁵⁵ The difference between the federal trial court and the Second Circuit opinions is one of slight distinction on the procedural ripeness of one issue presented prior to that issue being handled first by FERC, rather than a distinction of substance on the merits.²⁵⁶ Of note, the Third Circuit in the New Jersey case also elected not to add conflict preemption, once field preemption was found.²⁵⁷

D. Seventh Circuit and D.C. Circuit—Federal Wholesale Supremacy

The Seventh Circuit rendered two recent decisions, most recently in 2016, relevant to the constitutional separation of authority over energy

²⁵⁴See Entergy Nuclear Vt. Yankee, LLC v. Shumlin, 838 F. Supp. 2d 183, 233–34 (D. Vt. 2012), aff'd in part and rev'd in part by 733 F.3d 393 (2d Cir. 2013) (citations omitted).

²⁵⁵See Entergy Nuclear Vt. Yankee v. Shumlin, 733 F.3d 393, 433 (2d Cir. 2013).

²⁵⁶Id. at 407 ("The [trial] court then held that even if Entergy were to be forced to enter into a new PPA [power purchase agreement] in violation of the market-based tariff, its recourse would be to have the agreement reviewed by FERC.... The [trial] court thus declined to enjoin the defendants on the basis of [this] Federal Power Act claim."). Both the trial and Second Circuit courts agreed that this issue was not yet ripe for review since FERC review had not yet occurred. On the federal preemption claim in Count 1, both courts agreed that the Vermont law was preempted and permanently enjoined its enforcement as unconstitutional. On the third preemption claim in Count 2, it was found to be not yet ripe by both federal courts.

²⁵⁷PPL Energyplus, LLC. v. Solomon, 766 F.3d 241, 246 (3d Cir. 2014).

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regulation under the Supremacy and Commerce Clauses.²⁵⁸ The D.C. Circuit also rendered two relevant decisions in 2016.²⁵⁹

In a unanimous opinion written by Judge Richard Posner of the Seventh Circuit Court of Appeals, the court approved the FERC's approval of the Midwest Independent Service Operator's (MISO)²⁶⁰ choice of cost allocation of interstate transmission costs to transmit renewable power.²⁶¹ The court noted the dormant Commerce Clause's prevention of Michigan's discrimination against out-of-state renewable energy in its renewable portfolio standard program.²⁶² For its support of the applicable constitutional law, the court referenced the work of Professor Ferrey for its authority on the respective jurisdiction of federal and state governments to regulate electricity.²⁶³

The Seventh Circuit, again with Judge Posner, along with Judges Easterbrook and Hamilton, issued a second decision in 2016 that further punctuates the constitutional debate concerning the tension between state and federal jurisdiction to regulate. These matters involved FERC's prohibition of state rights-of-first-refusal (ROFRs) in ISO transmission planning. The Seventh Circuit held that an ISO operating pursuant to federal FERC authorization, or FERC itself, alone can control wholesale generation transactions so as to create a competitive wholesale power market: 266

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²⁵⁸See Ill. Commerce Comm'n v. FERC, 721 F.3d 764 (7th Cir. 2013); see also MISO Transmission Owners v. FERC, 819 F.3d 329 (7th Cir. 2016).

²⁵⁹See Am. Transmission Sys. v. FERC, 2016 U.S. App. LEXIS 12308 (D.C. Cir. July 1, 2016); see also Okla. Gas & Elec. Co. v. FERC, 827 F.3d 75 (D.C. Cir. 2016).

²⁶⁰MISO's service area extends from the Canadian border, east to Michigan and parts of Indiana, south to northern Missouri, and west to eastern areas of Montana. *See* Ill. Commerce Comm'n v. FERC, 721 F.3d 764, 770 fig.1 (7th Cir. 2013).

²⁶¹See id.

²⁶²Id. at 776.

²⁶³Id. (citing Steven Ferrey, *Threading the Needle: Constitutional Ways for Local Governments to Refuse Cooperation with Civil Immigration Policies*, 7 TEX. J. of OIL, GAS, & ENERGY LAW 59, 69, 106–07 (2012).

²⁶⁴MISO Transmission Owners, et al., v. FERC, 819 F.3d 329, 331 (7th Cir. 2016) (Petitions for Review of Orders of the Federal Energy Regulatory Commission).

²⁶⁵Id.; For more on legal issues associated with FERC Order 1000 and ISO authority, see Steven Ferrey, State Refusal Triggers Constitutional Crisis: Past is Prologue on Energy and Infrastructure, 34 REV. LITIG. 423 (2015).

²⁶⁶Miso Transmission Owners, 819 F.3d at 332 (stating "an independent system operator can coordinate the transmission system in a way that among other things promotes competition among

No one likes to be competed against.... [Incumbents] don't want to have to bid down the prices at which they will build new facilities in order to remain competitive.... [C]ontract rights are not sacred, especially when they curtail competition.... [A] contract in which the parties are seeking to protect themselves from competition from third parties (cartels are the classic example of such contracts) does not deserve... deference [under the *Mobile-Sierra* doctrine]. 267

Simultaneously, before the D.C. Circuit, there were two other unsuccessful challenges to federal FERC authority over transmission planning requirements, which conflicted with state policies. These challenges, one of which was raised by affiliates of FirstEnergy, 268 were dismissed by the D.C. Circuit for lack of jurisdiction. Another challenger before the D.C. Circuit argued that in FERC's Order 1000 and provision eliminating ROFRs (the same Order 1000 and ROFRs addressed in the matter above by the Seventh Circuit), FERC failed to make a finding of "serious harm" as required under the *Mobile-Sierra* doctrine. The D.C. Circuit upheld FERC's basic findings that the *Mobile-Sierra* contract protection for state provisions "does not extend to anti-competitive measures" and that the state ROFRs were not "the product of adversarial negotiations between sophisticated parties pursuing independent interests."

the producers of electrical power."); *id.* at 334 (determining that the incumbent utilities were "sophisticated enough to understand the benefits of a contract that would give each party protection against competition in the creation of new facilities.").

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²⁶⁷ "Transmission Competition": No Longer An Oxymoron, SCOTT HEMPLING ATTORNEY AT LAW LLC (Aug. 2016), http://www.scotthemplinglaw.com/transmission-competition.

²⁶⁸First Energy also was the party in the FERC decision involving Ohio's approved wholesale power sale rider. *See* Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *1.

²⁶⁹Am. Transmission Sys., Inc. v. FERC, 2016 WL 3615443, at *1 (D.C. Cir. July 1, 2016) (stating petitioners failed to preserve arguments before FERC, providing court no jurisdiction to hear complaint).

²⁷⁰S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41, 81 (D.C. Cir. 2014).

²⁷¹Okla. Gas & Elec. Co. v. FERC, 827 F.3d 75, 79–80 (D.C. Cir. 2016) (explaining it was anti-competitive in that there were "disincentives for nonincumbents [sic] to identify and commit resources to cost-effective solutions to transmission needs."); *see Miso*, 819 F.3d at 334 ("[N]egotiations . . . [were] among parties with the same interest, namely, protecting themselves from competition in transmission development.").

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IV. FERC PREEMPTION OF STATE REGULATION

A. FERC 2016 Orders on Wholesale Power Preemption

Two identical FERC 2016 decisions concerning Ohio regulation are particularly important and relevant for two reasons. First, they occurred at the same time as the Supreme Court decisions in *Hughes*²⁷² and *EPSA*.²⁷³ Second, the complainants in both FERC matters challenging state regulatory orders were the same named complainants in the *Hughes* and *EPSA* cases.²⁷⁴ Other than the federal Article III courts, FERC is the one executive branch agency with authority to render quasi-judicial decisions on the scope and application of federal energy jurisdiction.²⁷⁵

These disputes involved two of the largest conglomerate multi-state electric utilities (and their affiliates) in the country: First Energy²⁷⁶ and American Electric Power.²⁷⁷ There were two separate successive cases and two almost identical orders of FERC on the same day. Because they involved similar Ohio Public Utility Commission (OPUC) orders, the section below will analyze the *First Energy* decision, for which the *American Electric Power* decision was similarly decided.²⁷⁸

1. The Ohio Wholesale Power Regulatory Orders

Several of the Ohio investor-owned retail utilities, including First Energy and American Electric Power Company, proposed a concept where

²⁷²136 S. Ct. 1288 (2016).

²⁷³136 S. Ct. 760 (2016).

²⁷⁴See Order Granting Complaint, Elec. Power Supply Ass'n v. AEP Generation Res., Inc., 155 FERC 6112 (2016) (No. EL 16-33-000), 2016 WL 1717028, at *1; Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *1.

²⁷⁵Legal Analysis of Commission Jurisdiction Over the Rates, Terms and Conditions of Unbundled Retail Transmission in Interstate Commerce, 61 Fed. Reg. 21540 app. G (1996).

²⁷⁶Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *1.

²⁷⁷Order Granting Complaint, Elec. Power Supply Ass'n v. AEP Generation Res., Inc., 155 FERC 6112 (2016) (No. EL 16-33-000), 2016 WL 1717028, at *1 (matter involving the AEP Ohio affiliates).

²⁷⁸Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *61646; *see* Order Granting Complaint, Elec. Power Supply Ass'n v. AEP Generation Res., Inc., 155 FERC 6112 (2016) (No. EL 16-33-000), 2016 WL 1717028, at *1.

they would purchase power from their sister-wholesale market participants of the output of several coal and nuclear facilities.²⁷⁹ Rather than supply retail customers with this purchased power, they would sell that power into the PJM power market, and then purchase power back from that same PJM market. Under the terms of the affiliate power purchase agreements (PPAs) between the independent utility-owned wholesale plants and their retail subsidiaries, which has never been made public, First Energy Ohio Regulated Utilities (FE) would purchase the output of the Sammis coal and Davis-Besse nuclear generation facilities, as well as an entitlement to certain output owned by Ohio Valley Electric Corporation coal-fired plants, owned by FE Ohio Market Affiliates.²⁸⁰ That power would then be sold into the PJM wholesale market by the retail subsidiaries, and any loss or gain would be credited or billed to retail customer bills.²⁸¹

The power purchased under the affiliate PPA would not be used to serve retail consumers in the FE Ohio Regulated Utilities' service territories but would instead be resold into the markets administered by PJM Interconnection, L.L.C. (PJM). Any losses from the PJM sales under the affiliate PPA would be recoverable through an electric distribution service rate rider (PPA Rider) that was pending before the Ohio Commission at the time a complaint was filed with FERC contesting this arrangement. Supporters of this FE proposal submitted to FERC that the ongoing operation of these FE wholesale plants "directly and indirectly sustains substantial employment in Ohio, provides significant tax revenues, and

²⁷⁹Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *61646.

²⁸⁰Id. In connection with the implementation of retail choice in Ohio, the FE Ohio Regulated Utilities divested virtually all of their generation assets to FE Ohio Market Affiliates, including interests in various coal and oil-fired units at the W.H. Sammis Plant, the nuclear-powered David-Besse power station, and an entitlement to a portion of the output of generation units in Ohio and Indiana owned by Ohio Valley Electric Corporation. These assets represent an aggregate generating capacity of approximately 5531 MW. FE Solutions markets the output of these assets owned by its subsidiaries, FirstEnergy Generation Corporation, FirstEnergy Nuclear Generation Corporation, and FirstEnergy Generation Mansfield Unit 1 Corp. Id.

²⁸¹Id. at *61647.

 $^{^{282}}Id.$

²⁸³Id. at *61647 n.15 (citations omitted) ("Complainants state that the Ohio Commission proceeding concerning the PPA Rider is currently pending and they expect the Ohio Commission to issue an order as early as February 2016.... We note that the Ohio Commission issued an order in that proceeding on March 31, 2016.").

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supports the local economies and communities."284 The Utility Workers Union Local 457 added that the long-term viability of the Sammis coalfired plant may be at risk without the affiliate PPA to sell the power to affiliates.285

The mechanism approved in Ohio was essentially parallel to what Maryland and New Jersey did. In all, the state would have the retail utilities pay the difference between revenue received from the PJM competitive wholesale market and a fixed price set by the state regulatory agency. This "true up" is to set a fixed price determined unilaterally by the state entirely outside the wholesale market established by FERC, with payments to and/or from the ratepayers, is identical in both.²⁸⁶ The Ohio Public Utility Commission, after lengthy hearings, approved this proposed Electric Security Plan, including the PPA Rider, as modified and stipulated, on March 31, 2016.²⁸⁷

2. FERC Affiliate Wholesale Restriction and Waiver

FERC regulates affiliate transactions pursuant to FERC Order No. 697. FERC's wholesale affiliate power sales restrictions specify that no wholesale sale of electric energy or capacity may be made between a franchised public utility with captive customers²⁸⁸ and a market-regulated power sales affiliate, unless it first receives Commission authorization under § 205 of the Federal Power Act for that sale. ²⁸⁹ Applicants may seek "waiver" of the affiliate power sales restrictions by requesting a FERC determination that the Order No. 697 requirement to obtain prior approval for affiliate sales of energy or capacity is not applicable to their situation.²⁹⁰

²⁸⁴Id. at *61653.

²⁸⁶PPL EnergyPlus, LLC v. Solomon, 766 F.3d 241, 252 (3d Cir. 2014).

²⁸⁷Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *4.

²⁸⁸18 C.F.R. § 35.36(a)(6) (2015) ("Captive customers means any wholesale or retail electric energy customers served by a franchised public utility under cost-based regulation.").

²⁸⁹18 C.F.R. § 35.39(b) (2015); see also Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, 72 Fed. Reg. 39904-01 (July 20, 2007) (to be codified at 18 C.F.R. pt. 35).

²⁹⁰In Order No. 697—A, FERC explained that "its fundamental goal in categorizing certain customers as 'captive' is to protect customers served by franchised public utilities from inappropriately subsidizing the market-regulated or non-utility affiliates of the franchised public utility or otherwise being financially harmed as a result of affiliate transactions and activities."

When petitioned, FERC evaluates market-based affiliate transactions based on the standards set forth in *Boston Edison Co. Re: Edgar Electric Energy Co.*²⁹¹ and *Allegheny Energy Supply Co., LLC.*²⁹² Citing Order No. 697, the Commission stated that, "it is not the role of this Commission to evaluate the success or failure of a State's retail choice program including whether sufficient choices are available for customers inclined to choose a different supplier."²⁹³ On December 8, 2008, years before the dispute below, First Energy (FE) Ohio Market Affiliates had received a waiver of FERC's affiliate power sales restrictions based on the representation that Ohio is a retail choice state and that the FE Ohio Regulated Utilities did not have captive retail customers needing the protections afforded by those restrictions.²⁹⁴

Market-Based Rates for Wholesale Series of Electric Energy, Capacity and Ancillary Services by Public Utilities, 73 Fed. Reg. 25832-01 (May 7, 2008) (to be codified at 18 C.F.R. pt. 35) ("Where customers are served under market-based regulation as opposed to cost-based regulation, it is presumed that the seller has no market power over a customer and that the customer has a choice of suppliers; thus there is less opportunity for a customer to involuntarily be in a situation in which its rates subsidize or support another entity.").

²⁹¹Order Noting and Granting Interventions, and Rejecting Rates Without Prejudice, Boston Edison Co. Re: Edgar Elec. Energy Co., 55 FERC 61382 (1991) (No. ER 91-243-000), 1991 WL 266200, at *62168–9. In *Edgar*, the Commission provided examples of ways to demonstrate lack of affiliate abuse: (1) evidence of head-to-head competition; (2) evidence of prices which non-affiliated buyers were willing to pay for similar services from the project; and (3) benchmark evidence that shows the prices, terms, and conditions of sales made by non-affiliated sellers, which could include purchases made by the utility itself or by other buyers in the relevant market.

²⁹²Order Granting Authorization to Make Affiliate Sales, Allegheny Energy Supply Co., LLC, 108 FERC 61082 (2004) (No. ER 04-730-000), 2004 WL 1700580, at *61418–9. The principles are: (1) transparency, a requirement that the solicitation process be open and fair; (2) definition, a requirement that the product, or products, sought through the competitive solicitation be precisely defined; (3) evaluation, a requirement that the evaluation criteria be standardized and applied equally to all bids and bidders; and (4) oversight, a requirement that an independent third party design the solicitation, administer bidding, and evaluate bids prior to selection.

²⁹³Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, 72 Fed. Reg. 39904-01 (July 20, 2007) (to be codified at 18 C.F.R. pt. 35).

²⁹⁴Order Accepting Tariff Revisions and Granting Waiver of Affiliate Sales Restrictions, FirstEnergy Solutions Corp., 125 FERC 61356 (2008) (Nos. ER 09-134-000, ER 09-135-000, ER 09-136-000, ER 09-137-000), 2008 WL 5348189, at *62768. FE Ohio Regulated Utilities have been authorized to sell power to FirstEnergy Generation Corp. and to FirstEnergy Nuclear Generation Corp., each of which is a market-regulated power sales affiliate as previously indicated in note 4. *Id.* at *62767; *see* Ohio Edison Company, FERC Market-Based Rate Power Sales Tariff, § 19.05 Affiliate Sales (3.0.0); Cleveland Electric Illuminating Company, FERC Market-Based

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3. FERC Power Preemption Decisions

A group of complainants brought a petition before FERC regarding the Ohio FE plan. One in the group of complainants to FERC was EPSA, the party before the Supreme Court in 2016 in *FERC v. EPSA*. Also among the complainants to FERC was Talen Energy. Later, in *Hughes v. Talen Energy Marketing, LLC*, Talen was successful in contesting a similar issue concerning Maryland's CfD mechanism to utilize, in part, the PJM wholesale capacity market to incentivize new power generation projects to locate in Maryland.

In the Ohio matter, Talen and others argued that regardless of whether retail choice exists in Ohio, FE Ohio Regulated Utilities' Ohio ratepayers are held "captive because they [will have] no [ability] to avoid the [subsidized] costs" incurred under the Affiliate PPA and the PPA Rider by choosing another provider, since such charges are passed through to all Ohio ratepayers through a non-bypassable distribution charge. ²⁹⁹ Talen also argued that "the Affiliate PPA, combined with the PPA Rider, will subject all customers located in FE Ohio Regulated Utilities' distribution service territories to a non-bypassable generation charge regardless of whether the customers have exercised retail choice and opted to take service from another retail supplier." ³⁰⁰

Complainants argued that such affiliate sales were anti-competitive.³⁰¹ Complainants contended that FERC cannot rely on the Ohio Commission, which has no jurisdiction over wholesale rates or wholesale affiliate

Rate Power Sales Tariff, § 19.05 Affiliate Sales (3.0.0); Toledo Edison Company, FERC Market-Based Rate Power Sales Tariff, § 19.05 Affiliate Sales (3.0.0); *Ohio Edison Co.*, Docket No. ER06-1386-000, *et al.* (Oct. 4, 2006) (delegated letter order); *Ohio Edison Co.*, Docket No. ER06-46-000, *et al.* (Oct. 17, 2005) (delegated letter order).

²⁹⁵Notice of the complaint was published in the Federal Register, 81 Fed. Reg. 5729 (2016).

²⁹⁶136 S. Ct. 760 (2016).

²⁹⁷136 S. Ct. 1288, 1292 (2016).

²⁹⁸Id. at 1290.

²⁹⁹Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *61647; *see id.* at *26.

³⁰⁰ Id. at *61650-51.

³⁰¹Id. at *61647 ("Complainants argue that, while Ohio still has retail choice in the sense that customers may choose to receive retail service from competitive suppliers, the Affiliate PPA—coupled with the PPA Rider—effectively eliminate retail choice by requiring all retail customers, even those that opt to take service from a competitive retail supplier, to pay the costs associated with the Affiliate PPA.").

transaction, to ensure that the rates, terms, and conditions of the Affiliate PPA are just and reasonable and not unduly discriminatory. The office of the Ohio Consumers' Counsel estimated that if the involved generation clears the annual PJM capacity auction, the cost to Ohio's typical customers would be approximately \$800 per customer, and a cumulative total for all customers of approximately \$3.6 billion over the proposed eight-year term. The involved generation does not clear the auction, the Consumers' Counsel estimated the cost to Ohio customers at \$1,100 per customer and approximately \$5.15 billion cumulatively for all ratepayers over the proposed eight-year term. Talen and another intervenor set the cost of these preferential contracts to retail customers at \$2 billion more than the purchase of the same amount of power from another, non-affiliated, supplier.

Recall that the Fourth Circuit, in deciding on the initial appeal of what would become the *Hughes* case before the Supreme Court, noted about the Maryland order something that is also similar with the Ohio order: "Furthermore, the Order ensures—through a system of rebates and subsidies calculated on the basis of the PJM market rate—that CPV [the generator] receives a fixed sum for every unit of capacity and energy that it clears (up to a certain ceiling)."³⁰⁶ The FE proposal would do the same, setting a guaranteed floor price for wholesale power sales up to a ceiling amount pre-approved by the Ohio PUC. In the Maryland decision of the Supreme Court in 2016, the Court found that: "[s]o long as a [S]tate does not condition payment of funds on capacity clearing the [PJM] auction, the State's program would not suffer from the fatal defect that renders Maryland's program unacceptable."³⁰⁷

Concern was expressed to FERC beyond only the cost to Ohio wholesale consumers' ratepayers of subsidizing these transactions.³⁰⁸ Concern was raised that this Ohio PUC order could undermine the operation of the FERC-approved PJM wholesale energy and capacity

³⁰⁵See id. at *61647.

³⁰²Id. at *61648.

³⁰³*Id.* at *7.

 $^{^{304}}Id$.

³⁰⁶PPL EnergyPlus v. Nazarian, 753 F.3d 467, 476 (4th Cir. 2014).

³⁰⁷Hughes v. Talen Energy Mktg., 136 S. Ct. 1288, 1299 (2016).

³⁰⁸Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *61647.

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markets.³⁰⁹ "Some [parties] argue[d] that the FE Affiliate PPA and the PPA Rider represent a market-distorting subsidy that could disrupt competitive market forces and frustrate the prices and signals the markets are . . ." designed to create and enforce.³¹⁰ Talen and others argued that the order benefiting FirstEnergy would subsidize certain bidders and could have a "downward spiraling, domino effect" on PJM's wholesale electric energy and capacity market.³¹¹

Ohio Consumers' Counsel argue[d] that the Affiliate PPA and the PPA Rider constitute a return to cost-based regulation by providing a set rate of return that is guaranteed by captive customers regardless of how uneconomic the power plants may become. Ohio Consumers' Counsel argue[d] that the precedent respondents cite[d] for support is inapposite because, here, a non-bypassable surcharge allowing recovery of the costs of a particular Affiliate PPA effectively eliminates the protection of competition intended by [FERC] Order No. 697....³¹²

What would be eliminated is "retail customers' ability to choose a supplier for purposes of that contract, notwithstanding that state law allows retail choice." ³¹³

Ohio Consumers' Counsel maintaine[d] that the fundamental issue is not merely whether customers have a right to choose a retail supplier under Ohio law, but whether customers are captive with respect to the specific Affiliate PPA costs.

³⁰⁹Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *61652.

³¹⁰*Id.* ("The Pennsylvania Commission and others were concerned that the Affiliate PPA will harm organized wholesale markets through the retention of generation that should otherwise be retired and replaced by more economically efficient generation.").

³¹¹See id. ("Talen argue[d] that the Commission has recognized the harms to competitive markets associated with allowing units to switch between market-based and cost-based regulation.").

 $^{^{312}}Id.$

 $^{^{313}}Id.$

... The Ohio Consumers' Counsel argue[d] that the underlying Affiliate PPA raises the potential for subsidies not only by Ohio retail consumers, but also for cross-subsidies among the different types of resources owned by FE Solutions that could affect the competitiveness of FirstEnergy Solution's resources in wholesale energy markets.³¹⁴

Note that the approved Ohio plan is more direct in affecting the PJM wholesale market than were the Maryland³¹⁵ or New Jersey³¹⁶ programs, because in Ohio the Ohio regulated utility bids the electricity products into the PJM market, rather than independent unregulated generators making the bids into the PJM market as would occur in the Maryland and New Jersey programs.

This plan was not only an exclusive wholesale transaction, but it was doubly wholesale: The first wholesale sale was from the affiliated FE IPPs to FE's Ohio retail utilities; the second wholesale sale was from those FE retail utilities into the PJM wholesale market. Wholesale sales are exclusively within federal authority. Even a minor or indirect intrusion of state regulation crosses this "bright line" and is not permitted. FERC upheld the complaint and upheld that the requirement of 18 C.F.R. § 35.39(b) to obtain prior FERC approval for affiliate sales of electric energy or capacity, applies to the sale by these Ohio IPPs to their related utilities under the PPA that the Ohio PUC had approved.

FERC simultaneously rescinded any application of the 2008 FERC waiver it previously had granted to FE as to the new affiliate PPA and found that the new affiliate PPAs that FE Solutions proposed must be

³¹⁵See PPL Energyplus, LLC v. Nazarian, 974 F. Supp. 2d 790, 801 (D. Md. 2013).

 $^{^{314}}Id$

³¹⁶See PPL Energyplus, LLC v. Hanna, 977 F. Supp. 2d 372, 378 (D.N.J. 2013).

 $^{^{317}} See$ Public Util. Comm'n of R. I. v. Attleboro Steam & Elec. Co., 273 U.S. 83, 89–90 (1927).

³¹⁸See Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288, 1298, n.11 (2016).

³¹⁹Elec. Power Supply Ass'n, et al v. FirstEnergy Sols. Corp., et al., 155 FERC ¶ 61,101, FERC Docket No. EL16-34-000, Order Granting Complaint, April 27, 2016 ("We note that, pursuant to this finding, no sales may be made with respect to the Affiliate PPA unless and until the Commission approves the Affiliate PPA under *Edgar* and *Allegheny*. As such, the requirement in 18 C.F.R. § 35.39(b) to obtain prior approval for affiliate sales of electric energy or capacity applies to any FE Ohio Market Affiliate to the extent such entity is a seller under the Affiliate PPA.").

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submitted to FERC for review and approval.³²⁰ In reaching this decision, FERC applied the precedent of *Edgar* and *Allegheny* in accordance with 18 C.F.R. § 35.39(b):

These non-bypassable charges present the potential for the inappropriate transfer of benefits from [captive] customers to the shareholders of the franchised public utility, and, thus, could undermine the goal of the Commission's affiliate restrictions

While the Ohio Commission may have analyzed the effect of the PPA Rider on retail customers, only this Commission can exercise jurisdiction to review the Affiliate PPA. Therefore, we find that the Commission's affiliate sales restrictions will apply to the Affiliate PPA, and, as stated above, we accordingly rescind waiver of section 35.39(b) as to the Affiliate PPA.

This decision of FERC³²² parallels key aspects of the Supreme Court decision in *Hughes*. ³²³ Ohio's program utilizes a "contract for differences" mechanism as did Maryland in the *Hughes* matter and as did New Jersey in its similar program stricken by the Third Circuit and referred to in the *Hughes* opinion: ³²⁵

[Ohio ratepayers] "involuntarily . . . in a situation in which [their] rates subsidize or support another entity"—i.e., they must pay a non-bypassable generation-related charge, through the PPA Rider, representing a contract for price differences in wholesale energy, capacity, and ancillary services, as determined by the state regulatory authority, irrespective of their retail provider.³²⁶

323 136 S. Ct. 1288 (2016).

³²⁰Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *61646.

³²¹*Id.* at *61655, *61657.

 $^{^{322}}Id$

³²⁴PPL Energyplus, LLC v. Solomon, 766 F.3d. 242, 252 (3d Cir. 2014).

³²⁵ Hughes v. Talen Energy Mktg. LLC, 136 S. Ct. 1288, 1290 (2016).

³²⁶Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *61656.

B. FERC—California Wholesale Regulatory Preemption

A related preemption decision was rendered by FERC regarding California's promotional feed-in-tariffs imposed on California's retail utilities involuntarily. The California feed-in-tariff required state utilities to make wholesale power purchases from only in-state cogeneration plants that were a size less than 20 Mw. The feed-in-tariff was deliberately in excess of wholesale market wholesale rates. The tariff was greater than avoided costs, and on that basis it was challenged at FERC as a violation of the Federal Power Act and therefore preempted by the Supremacy Clause of the Constitution. 327

California argued, as it did later again in the California LCFS case, ³²⁸ that its environmental purpose for regulation should make it exempt from preemption challenges. ³²⁹ The affected utilities countered that: ³³⁰

- Federal law does not allow state regulation of wholesale sales to achieve state environmental goals.
- Federal preemption cannot be avoided based on an environmental purpose of the preempted state regulation.
- States may not under the guise of environmental regulation adopt an economic regulation that requires purchases of electricity at a wholesale price outside the framework of the Federal Power Act, or if acting under PURPA, at a price that exceeds avoided cost.

Judges must focus only on an agency's contemporaneous explanations for its actions in evaluating rationality. FERC rejected all of California's arguments. FERC found that in-state renewable wholesale generators could receive no more than the federally-prescribed fair wholesale market

³²⁷18 C.F.R. 292.304(e). Avoided cost is defined as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source." 18 C.F.R. § 292.101(b)(6).

³²⁸PPL EnergyPlus, LLC v. Nazarian, 753 F.3d 467, 474 (4th Cir. 2014).

³²⁹Cal. Pub. Utils. Comm'n, 132 FERC 61047, 61331 (2010) (Order on Pet.'s for Declaratory Order).

³³⁰*Id.* at 61330.

³³¹See S.E.C. v. Chenery Corp., 318 U.S. 80, 87 (1943).

³³²Cal. Pub. Utils. Comm'n, 132 FERC 61047, 61338 (2010) (Order on Pet.'s for Declaratory Order); Cal. Pub. Utils. Comm'n, 133 FERC 61059, 61268 (2010) (Order Dismissing Rehearing).

prices under federal law. 333 FERC reiterated that only the federal government can regulate commerce between the states, and California cannot attempt to regulate commerce outside its borders.³³⁴ As to jurisdiction, FERC refused California's request to agree that facilities interconnected at the distribution level, rather than the transmission level, are beyond FERC's authority. 335 Instead, FERC reaffirmed that FERC has "exclusive jurisdiction" regardless of location geographically and whether the power generation is on the transmission or lower voltage distribution system.³³⁷

California argued that the state mandating that regulated utilities only "offer" to purchase wholesale power at substantially above wholesale market rates, is different than a requirement to actually "purchase" the sold power, and does not control wholesale rates.³³⁸ California was not persuasive to FERC. 339 It held that FERC's authority under the Federal Power Act includes the exclusive jurisdiction to regulate the rates, terms and conditions of sales for resale of electric energy in interstate commerce, and preempts any state authority. 340 FERC also rejected California's argument that prior legal precedent no longer applied because California now sought to address climate change.³⁴¹

After losing, California moved for FERC rehearing, or in the alternative a clarification, of this FERC order.³⁴² While FERC dismissed a rehearing of whether California had authority over preempted wholesale power sale

³³³See Cal. Pub. Utils. Comm'n, 132 FERC 61047, 61337-9 (2010) (Order on Pet.'s for Declaratory Order).

³³⁴ See Cal. Pub. Utils. Comm'n, 133 FERC 61059, 61266 (2010) (Order Dismissing Rehearing). FERC also reaffirmed that since a state cannot add a bonus or "adder" to the tariff that is not real and actually incurred by the buying utility, a bonus can be supplied "outside the confines of, and, in addition to the PURPA avoided cost rate, through the creation of renewable energy credits (RECs)." Id. at 61268.

³³⁵Cal. Pub. Utils. Comm'n, 132 FERC 61047, 61339 (2010) (Order on Pet.'s for Declaratory

³³⁶Id. (citing F.P.C. v. S. Cal. Edison Co., 376 U.S. 205, 216 (1964)).

³³⁷Id.

³³⁸Id. at 61327.

³³⁹Id. at 61337–8.

³⁴⁰See 16 U.S.C. §§ 824, 824d, 824e (2006); e.g., Miss. Power & Light Co. v. Miss. ex rel. Moore, 487 U.S. 352, 377 (1988).

³⁴¹Cal. Pub. Utils. Comm'n, 132 FERC 61047, 61338 (2010) (Order on Pet.'s for Declaratory Order).

³⁴²Cal. Pub. Utils. Comm'n, 133 FERC 61059, 61266 (2010) (Order Dismissing Rehearing).

rates,³⁴³ FERC did issue a clarification that the avoided costs determined by states only for a Qualifying Facility ("QF") selling power to the utility could be determined with respect to actual costs incurred by the purchasing electric utility, and reflect requirements or restrictions imposed under state law on the technologies eligible, thus yielding different tariffs for different technologies subject to state law supply mix requirements.³⁴⁴ This is wholly consistent with the Supreme Court ruling in *Hughes* in 2016.³⁴⁵ FERC, also consistent with the subsequent *Hughes* decision, held that California could have subsidized and provided financial incentives for the development of certain kinds of power with more tax subsidies,³⁴⁶ or more renewable portfolio standards,³⁴⁷ but not with alteration of the wholesale price of energy.

In this matter, and in its 2016 decision involving Ohio regulation,³⁴⁸ FERC has reiterated and applied the consistent line of Supremacy Clause and Filed Rate precedent of the Supreme Court. This consistent "bright line" of reasoning was punctuated again by the Supreme Court in 2016 in *Hughes*.³⁴⁹

V. CHANGING TECHNOLOGY: "BRIGHT LINE" LAW

Electricity is the second most important invention in history, and its legal regulation is tempered by the Supremacy Clause and Commerce Clause of the Constitution, and the Federal Power Act. In the American economy and American system of law, electricity is critical. The "golden thread of energy" in the United States is judged by the Supreme Court, the federal circuit courts of appeal, and the Federal Energy Regulatory Commission. FERC, for two decades, has issued orders to increase wholesale market competition, and legally withstood most attacks against

³⁴³*Id.* at 61265.

³⁴⁴*Id.* at 61265–7.

³⁴⁵ Hughes v. Talen Energy Mktg. LLC, 136 S. Ct. 1288, 1297, 1299 (2016).

³⁴⁶For information on tax subsidies, see Ferrey, *supra* note 3 at Tables 3.13, 3.15, 3.19.

³⁴⁷Ferrey, *supra* note 263, at 60.

³⁴⁸Elec. Power Supply Ass'n., 155 FERC 61646 (2016) (Order Granting Complaint).

³⁴⁹Hughes, 1288 S. Ct. at 1297.

³⁵⁰See Fallows, supra note 2, at 3.

³⁵¹Stuart Bruce, *International Law and Renewable Energy: Facilitating Sustainable Energy For All?*, 14 MELB. J. INT'L L. 18, 19 (2013).

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this.³⁵² In *EPSA*, the Court notes that the electricity market has evolved to become a "competitive interstate business, and FERC's role has evolved accordingly."³⁵³

At the start of the current twenty-first century, the Supreme Court concluded that "the landscape of the electric industry has changed since the enactment of the FPA [Federal Power Act], when the electricity universe was 'neatly divided into spheres of retail versus wholesale sales." In 2014, nearly forty percent of U.S. electricity was generated by what the U.S. Information Administration terms "independent power producers," having increased almost 400% from about 10% two decades earlier. There has been "a massive shift in regulatory jurisdiction from the states to FERC... The upshot of these federal and state innovations in electricity regulation is that state regulators, despite their continued authority over rates charged directly to consumers, have much less actual authority over those rates than they did [earlier]."

The Supreme Court in 2016 reinforced the traditional "bright line" of separate government jurisdiction and rejected any "presumption against preemption" of state energy regulation. The Fourth Circuit decision in the *Hughes* matter notes that in recent times, the role of federal regulation has become increasingly prominent. However, the states have chosen, to some degree, the erosion of some of their authority. No state is compelled to participate in an ISO wholesale market subject to exclusive federal jurisdiction. The Circuit Court, prior to the *Hughes* Supreme Court decision, stressed that Maryland chose to abandon its prior state model "and throw in its lot with the federal interstate market."

³⁵²See supra notes 161–179.

³⁵³*Hughes*, 136 S. Ct. at 1292 (citing FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760, 768 (2016)).

³⁵⁴New York v. FERC, 535 U.S. 1, 16 (2002) (quoting Transmission Access Policy Study Group v. FERC, 225 F.3d 667, 691 (D.C. Cir. 2000) (upholding Order No. 888)).

³⁵⁵U.S. ENERGY INFO. ADMIN., ELEC. POWER MONTHLY Tbls. 1.2, 1.3, 1.4, 1.5 (Aug. 2015) http://www.eia.gov/electricity/monthly/.

³⁵⁶FERC, Order No. 888, 61 Fed. Reg. 21540, 21548-9 (1996).

³⁵⁷Pub. Util. Dist. No. 1 of Snohomish Cnty. Wash. v. FERC, 471 F.3d 1053, 1066–67, *aff'd in part and rev'd in part sub nom* (9th Cir. 2006); *see* Morgan Stanley Capital Group, Inc. v. Pub. Util. Dist. No. 1, 554 U.S. 527, 532 (2008); *see also* Entergy v. Shumlin, 733 F.3d 393 (2d Cir. 2013).

³⁵⁸See Hughes, 136 S. Ct. at 1297, 1298.

³⁵⁹ See id. at 1296.

³⁶⁰PPL Energyplus, LLC v. Nazarian, 753 F.3d 467, 473 (4th Cir. 2014).

In the dozen recent Supreme Court, FERC, and federal circuit courts of appeals energy preemption decisions, ³⁶¹ there is consistent federal precedent either that numerous states have crossed the "bright line" prohibiting state regulation of power and that state energy regulation therefore is stricken, or that the universe of federal energy regulation is expanding to include a widening spectrum of federal authority. ³⁶² The *Hughes* Supreme Court decision does not grant any deference to Maryland's state energy regulation; it grants deference only to FERC. ³⁶³ The Supreme Court's 2016 decisions control regulation of the second most important invention in history. ³⁶⁴

In addition to the Supreme Court, the recent decisions examined above directly include six of the federal circuit courts of appeals,³⁶⁵ as well as FERC decisions regarding the legality of state regulation by states within two other federal circuits.³⁶⁶ These decisions rendered by more than half the circuit courts of appeal, along with FERC decisions covering states within two other federal circuits, comprise legal determinations regarding state energy regulation within more than two-thirds of the federal circuit courts of appeals. Along with two 2016 Supreme Court decisions, these construct an indelible consistent constitutional "bright line." Moreover, no other circuit courts have held to the contrary.

³⁶¹See FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760, 783–84 (2016); *Hughes*, 136 S. Ct. 1288; *Nazarian*, 753 F.3d 467; Cal. Pub. Utils. Comm'n, 132 FERC 61047 (2010) (Order on Pet.'s for Declaratory Order).

³⁶²See cases cited supra note 361.

³⁶³See Hughes, 1298 S. Ct. at 1298.

³⁶⁴See Fallows, supra note 2, at 17. Electricity finished behind only the movable type printing press. Electricity is essential to operate seven other "top fifty" inventions of all time: The Internet, computers, air-conditioning, radio, television, the telephone, and semiconductors. Steven Ferrey, Ring Fencing the Power Envelope of History's Second Most Important Invention of All Time, 40 WM & MARY ENVIL. L & POL'Y REV. 1, 3 (2015).

³⁶⁵See Nazarian, 753 F.3d 467; PPL Energyplus, LLC v. Solomon, 766 F.3d at 241 (3d Cir. 2014); Ill. Commerce Comm'n v. FERC, 721 F.3d 764 (7th Cir. 2013); MISO Transmission Owners v. FER.C, 819 F.3d 329 (7th Cir. 2016); North Dakota v. Heydinger, 825 F.3d 912 (8th Cir. 2016); Ariz. Dream Act Coalition v. Brewer, 818 F.3d 901 (9th Cir. 2016); Entergy Nuclear Vt. Yankee v. Shumlin, 733 F.3d 393 (2d Cir. 2013).

³⁶⁶See Order Granting Complaint, Elec. Power Supply Ass'n v. AEP Generation Res., Inc., 155 FERC 6112 (2016) (No. EL 16-33-000), 2016 WL 1717028, at *1; Order Granting Complaint, Elec. Power Supply Ass'n v. FirstEnergy Sols. Corp., 155 FERC 61101 (2016) (No. EL 16-34-000), 2016 WL 1717024, at *1.

³⁶⁷See FERC v. Elec. Power Supply Ass'n, 136 S. Ct. 760, 783–84 (2016).

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The 2016 Supreme Court *Hughes* opinion and federal Courts of Appeals decisions preempt the authority of 47 of the 50 states. Each interprets the Federal Power Act,³⁶⁸ which only applies the Constitution's Supremacy Clause to those states engaging in interstate commerce, which Hawaii and Alaska remoteness make that impossible, and the majority of Texas has chosen to remain disconnected from interstate transmission lines and commerce. Thus, there are three states that do not engage in interstate commerce in power and are exempt from this preemption pursuant to the Supremacy Clause under the Federal Power Act. 369 Forty-seven interconnected continental states have had their authority over power substantially confined.

These recent 2016 federal court decisions reorient the center of gravity of national sustainable energy policy. Notwithstanding the substantial erosion of state power, the states, rather than the federal government, have led the reduction of climate change emissions through a transition to lowcarbon renewable electric sources.³⁷⁰ However, more regulatory authority over electric energy is now segregated across a line beyond any state power. There are now constitutional 'trip-wires' for states implementing the most significant forms of incentives for climate control and renewable energy: Net metering³⁷¹ Renewable Portfolio Standards,³⁷² feed-in tariffs,³⁷³ and greenhouse gas emission regulation.³⁷⁴

And there is a price for states taking action that crosses the constitutional "bright line": unconstitutional state energy regulation can result in states being sanctioned and required to pay challengers' attorney

^{368 16} U.S.C. § 824a (2015).

³⁶⁹Steven Ferrey, Carbon Outlasts the Law: States Walk the Constitutional Line, 41 B.C. ENVTL. AFF. L. REV. 309, 312 (2014).

³⁷⁰*Id.* at 363.

³⁷¹Steven Ferrey, Virtual 'Nets' and Law: Power Navigates the Supremacy Clause, 24 GEO. INT'L ENVT'L L. REV. 267, 270 (2013); Steven Ferrey, Net Zero: Distributed Generation and FERC's MidAmerican Decision, 17 ELEC. J. 33, 33 (Oct. 2004); Steven Ferrey, Nothing But Net: Renewable Energy and the Environment, MidAmerican Legal Fictions, and Supremacy Doctrine, 14 DUKE ENVT'L L. & POL'Y F. 1, 15 (2003).

³⁷²Ferrey, *supra* note 347, at 60.

³⁷³Ferrey, supra note 96, at 125; Steven Ferrey, Chad Laurent & Cameron Ferrey, "FiT in the U.S.A.," Public Utilities Fortnightly (June 2010).

³⁷⁴Steven Ferrey, Goblets of Fire: State Programs on Global Warming and the Constitution, 35 ECOLOGY L. Q. 835, 837 (2009).

fees. 375 Several of the above-discussed successful challenges to state energy regulation, when found to be unconstitutional state action, have held the states' taxpayers liable for multiple millions of dollars for attorney fees and costs incurred by the successful challengers.³⁷⁶ Crossing the jurisdictional line becomes a 'lose-lose' situation for the states and their citizens.

The constitutional "bright line" between state and federal authority has been etched indelibly in higher relief by the Supreme Court in 2016. There are more limited opportunities for states to regulate, because of a substantial shift of energy markets from state-regulated retail transactions to federally regulated wholesale power transactions. With less legal room to maneuver to enact energy policy, states must be smarter than in the past to enact state law, as mapped in detail in another article.³⁷⁷ Increasingly, careful legal navigation matters to regulate the world's second most important invention and technology.

³⁷⁵42 U.S.C. § 1983 (2012) ("[Any] person who . . . subjects, or causes to be subjected any citizen of the United States or other person . . . to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress ... unless a declaratory decree was violated or declaratory relief was unavailable."). In any action enforcing 42 U.S.C. § 1983, 42 U.S.C. § 1988 permits a court to "allow the prevailing party, other than the United States, reasonable attorney's fee as part of the costs." Section 1988 also allows for expert fees to be included as part of the attorney's fee. See discussion supra note 177 (discussing how states have been ordered to pay challengers' attorney fees, which have run well into seven figures per level of court or appeal).

³⁷⁶See PPL Energyplus, LLC v. Nazarian, 974 F. Supp. 2d 790, 825 (D.Md. 2013) (discussing field preemption and conflict preemption on wholesale power prices); PPL Energyplus, LLC v. Hanna, 372, 408–09 (D.N.J. 2013); PPL Energyplus, LLC v. Solomon, 766 F.3d 241, 250 (3d Cir. 2014) (field preemption on wholesale power prices and rates); Entergy Nuclear Vermont Yankee, LLC v. Shumlin, 838 F. Supp. 2d 183, 218 (D. Vt. 2012).

³⁷⁷See Steven Ferrey, Solving the Multimillion Dollar Constitutional Puzzle Surrounding State 'Sustainable' Energy Policy, 49 WAKE FOREST L. REV. 121, 122 (2014).