

FORMALISM, FUNCTIONALISM, AND FEDERALISM:
THE PRACTICAL IMPORT OF *ELECTRIC POWER
SUPPLY ASSOCIATION V. STAR* AND *COALITION FOR
COMPETITIVE ELECTRICITY V. ZIBELMAN* FOR STATE
CLEAN ENERGY SUPPORT POLICIES

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INTRODUCTION

The story of U.S. electricity sector regulation is a story of evolving federalism. In an industry defined by a confluence of long-term developments in technical capabilities, economic and regulatory design, and environmental objectives, federalism, too, strives to keep pace. With each significant development, the formal understanding of the respective roles of federal and state regulators has evolved. And each attempt at formal distinction between state and federal authority belies deeper functional implications.

A growing number of states seek to meet their environmental and climate goals by supporting development and use of low-carbon or carbon-free electricity generation resources.¹ Such state support policies have renewed focus on demarcating federal and state jurisdiction in the electricity sector. Two recent federal appellate decisions not only illustrate the contest over the formal understanding of federalism in the power sector, but also set the stage for a subsequent battle over the functional import of these formal demarcations. In *Electric Power Supply Association v. Star*² and *Coalition for Competitive Electricity v. Zibelman*,³ the Seventh and Second Circuits, respectively, upheld state support mechanisms for nuclear power plants against preemption challenges. While the cases yield important formal victories for state autonomy over clean energy policy by securing state support mechanisms against the “blunt” instrument of pre-

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1. At least thirty-eight states have adopted renewable energy policies such as renewable portfolio standards (“RPSs”), renewable energy credits (“RECs”), zero emission credits (“ZECs”), and other policies to achieve state energy, climate, and environmental goals. See *State Renewable Portfolio Standards and Goals*, NAT’L CONFERENCE OF STATE LEGISLATURES (Feb. 1, 2019), <https://perma.cc/P6HN-JLV9>.
2. 904 F.3d 518 (7th Cir. 2018), *cert. denied*, 139 S. Ct. 1547 (U.S. Apr. 18, 2019) [hereinafter *EPSA v. Star*].
3. 906 F.3d 41 (2d Cir. 2018), *cert. denied sub nom.* *Electric Power Supply Ass’n v. Rhodes*, 139 S. Ct. 1547 (U.S. Apr. 18, 2019).

emption,⁴ the functional import of these mechanisms may ultimately be determined in federal proceedings to regulate electricity capacity markets.

The electric power sector has historically featured strong state regulatory presence. Municipal and state utility commissions regulated electric utilities before their counterpart federal commission even existed.⁵ When Congress passed the 1935 Federal Power Act (“FPA”), the Federal Power Commission (now the Federal Energy Regulatory Commission (“FERC”)) was granted exclusive jurisdiction over “the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce.”⁶ States, meanwhile, retained authority to regulate generation⁷ as well as intrastate transmission, local distribution, and retail.⁸ Electricity industry restructuring and transmission open access requirements in the 1990s led to the development of wholesale markets.⁹ Today, wholesale markets employ auctions to procure and price energy, capacity, and ancillary services.¹⁰ The evolution of wholesale markets heralded a more significant role for federal regulation of electricity, unsettling the FPA’s envisaged cooperative federalism arrangement in which federal

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4. Brief for the United States and FERC as Amici Curiae in Support of Defendants-Respondents and Affirmance at 20, *EPSA v. Star*, 904 F.3d 518 (Nos. 17-2433, 17-2445), 2018 WL 2746229, at *20 [hereinafter FERC Brief].
 5. See THOMAS P. HUGHES, NETWORKS OF POWER 207 (1983). In the early 1900s, states sought to wrest regulatory authority over electricity utilities from municipalities. See STEVEN STOFF, POWER SYSTEM ECONOMICS 6 (2002) (describing the establishment of the first two state utility commissions in 1907); *About Us*, NAT’L ASS’N OF REGULATORY UTIL. COMM’RS, <https://perma.cc/KEA5-GGGL> (explaining that NARUC, the association of state public utility commissions, predates the formation of the Federal Power Commission (now FERC) by just over 40 years).
 6. 16 U.S.C. § 824(a) (2012).
 7. States possess authority to select what generation resources to build and where to construct them. *Id.* § 824(b)(1). Hydroelectric licensing and operations, however, are subject to federal oversight. *Id.* § 797.
 8. *Id.* § 824(b)(1).
 9. See FRED BOSSELMAN ET AL., ENERGY, ECONOMICS, AND THE ENVIRONMENT: CASES AND MATERIALS 610–14 (2010) (discussing drivers of restructuring—separating network natural monopolies from competitive generation—and passage of Public Utility Regulatory Policy Act); see also *id.* at 624 (describing how FERC used its authority under the 1992 Energy Policy Act to increase open access and competition).
 10. See ERIK ELA ET AL., NAT’L RENEWABLE ENERGY LAB., EVOLUTION OF WHOLESALE ELECTRICITY MARKET DESIGN WITH INCREASING LEVELS OF RENEWABLE GENERATION 6–16 (2014), <https://perma.cc/85YH-LBZP> (describing present-day operation of wholesale and ancillary markets); see also PJM, UNDERSTANDING THE DIFFERENCE BETWEEN PJM’S MARKETS (2019) <https://perma.cc/8SS6-CVAN>; ISO NEW ENGLAND, ADMINISTERING THE WHOLESALE ELECTRICITY MARKETS (2019), <https://perma.cc/M5A7-84XV>.

and state regulators each regulated distinct spheres of the electric utility industry.¹¹

This precarious balance of cooperative federalism has increasingly come into question. With the advent of distributed generation, demand-side resources, and renewable energy generation targets and supports, spheres of the electricity sector—such as distribution and generation—that states have comfortably regulated separately from the federal sphere of wholesale markets are now straddling traditional boundaries between wholesale and retail, bulk and distribution, interstate and intrastate.¹² State policies to encourage low-carbon electricity resources influence the mix, quantity, and price of generation participating in wholesale electricity markets. Regulating the rules of such markets—to ensure that electricity rates are “just and reasonable”—falls squarely within federal authority.¹³ As such, energy policies in pursuit of state goals have come under fire for their potential to frustrate federal regulatory goals.

While the *EPSA v. Star* and *Coalition* decisions reaffirm state authority to implement policy supports for generation resources that participate in wholesale electricity markets, the rules of those very markets significantly influence the financial viability of participating resources and, as a result, of states’ generation mixes. Recent contention over capacity market design has arisen from generators’ concerns about continued profitability in wholesale markets in the presence of increasingly ambitious state energy policies.¹⁴ Capacity market rules are set by Independent System Operators (“ISOs”) and approved by FERC.¹⁵ In

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11. See, e.g., BOSSELMAN ET AL., *supra* note 9, at 13 (“[D]efining the precise line between state and federal jurisdiction over [natural gas and electricity] rates and service has produced a great deal of litigation.”).
 12. See, e.g., *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288 (2016) (prohibiting state subsidization of wholesale generators); *FERC v. Elec. Power Supply Ass’n*, 136 S. Ct. 760 (2016) [hereinafter *FERC v. EPSA*] (assigning federal jurisdiction over aggregated distributed resources in wholesale markets); *WSPP Inc., Order Conditionally Accepting Service Scheduler*, 139 FERC ¶ 61,011 (Apr. 20, 2012) (supporting states’ authority to adopt REC programs).
 13. 16 U.S.C. § 824d(a).
 14. See, e.g., *CXA La Paloma, LLC v. Cal. Indep. Sys. Operator Corp.*, 165 FERC ¶ 61,148 (Nov. 19, 2018) (denying petition to mandate establishment of California ISO capacity market in response to generator fears that California clean energy policies threaten generators’ financial viability).
 15. ISOs—also known as Regional Transmission Organizations (“RTOs”)—operate generation dispatch and transmission networks in competitive electricity markets throughout the United States, and coordinate regional power system planning. PJM is the ISO that oversees electricity markets and transmission for Pennsylvania, New Jersey, Maryland, ten other states, and the District of Columbia. While much of Illinois falls within the Midcontinent ISO’s (“MISO’s”) service territory, the portion of northeastern Illinois encompassing Chicago falls within PJM. See PJM, MAP OF PJM TERRITORY SERVED, <https://perma.cc/SZL2-2UQW>. Some ISOs primarily encompass a single state, such as NYISO in New York. See *What We Do*, NYISO, <https://perma.cc/9SDZ-7F4L>.

2016, a group of generators claimed that one of those ISOs, PJM, had capacity market rules that failed to account for the impacts of state subsidies on capacity prices.¹⁶ FERC agreed that PJM's tariff must be modified to address market effects of state "out-of-market payments," but rejected the modifications proposed by PJM and initiated a paper hearing process to evaluate alternatives.¹⁷ This renewed focus on capacity market design left unresolved the fate of state support policies in electricity markets.

I. BACKGROUND: CAPACITY MARKETS, ZERO EMISSION CREDITS, AND FEDERALISM

A. *Electricity Capacity Markets*

Electricity capacity markets procure long-term electricity generation resources (or load reduction) to meet anticipated demand. They are "forward" markets in that they secure generation resources for *future* years. For example, PJM's annual base residual capacity auction secures the commitment of generation resources that can be called upon three years in the future.¹⁸ This forward-looking feature provides time for investment in new generation capacity.

In a capacity auction, each participating generator bids a quantity of generation capacity, and a price at which it is willing to offer that capacity. Bids are "stacked" from lowest offer price to highest offer price. The market clears at the quantity that fulfills the anticipated resource requirement (i.e., anticipated demand). The offer price of the last unit needed to meet the quantity requirement (the marginal unit) is the market-clearing price. This is the price all generators that cleared the market receive. Thus, the marginal unit receives its offer price, and the first, least expensive unit receives a per-unit profit of the difference between its offer price and the market-clearing price. Figure 1 illustrates an auction with six generation resources (R1–R6). The market-clearing price signals efficient entry and exit: if capacity is scarce, higher prices encourage entry; if capacity is abundant, lower prices discourage entry and may encourage exit. Offer prices may be subject to regulatory floors or caps.¹⁹

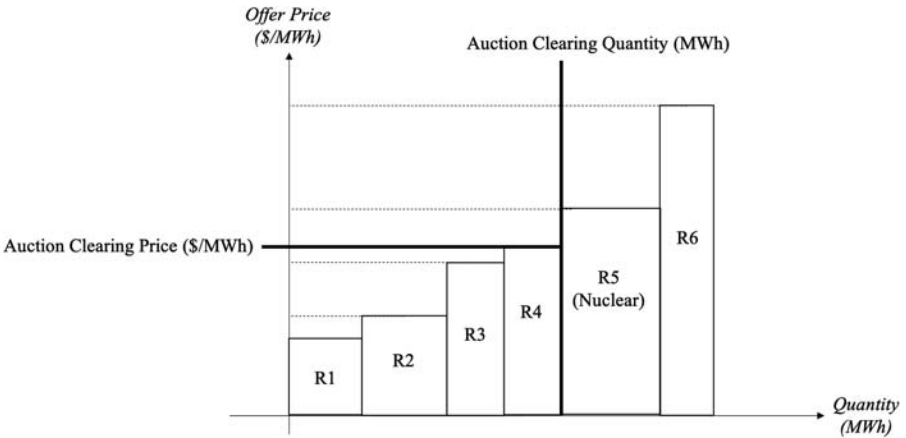
16. See Complaint Requesting Fast Track Processing at 2, *Calpine Corp. et al. v. PJM Interconnection, L.L.C.* (No. EL16-49-000).

17. *Calpine Corp.*, 163 FERC ¶ 61,236, para. 5–6 (June 29, 2018) (Order Rejecting Proposed Tariff Revisions, Granting in Part and Denying in Part Complaint, and Instituting Proceeding Under Section 206 of the Federal Power Act). FERC sought to issue a final decision in January 2019, before PJM's 2019 Base Residual Auction. See *id.* at para. 172. Meanwhile, PJM filed a proposal for new reserve market price-formation rules. See *Enhanced Price Formation in Reserve Markets of PJM Interconnection, L.L.C.* at 2–3, *PJM Interconnection, L.L.C.* (2019) (No. EL19-58-000).

18. See PJM, *Capacity Market (RPM)* (2019), <https://perma.cc/Y7S8-4LSQ>.

19. See, e.g., James Bushnell et al., *Electricity Capacity Markets at a Crossroads* 27 (Davis Energy Econ. Program, Working Paper No. 017, 2017), <https://perma.cc/LVC6-59TP>.

Figure 1 — Capacity market-clearing without ZECs (unsubsidized nuclear generation does not clear auction)



B. Zero Emission Credits

In 2016, the Illinois legislature adopted a Zero Emission Credit (“ZEC”) program as part of its Future Energy Jobs Act.²⁰ That same year, under the State of New York’s Clean Energy Standard, the New York Public Service Commission (“PSC”) implemented a ZEC program.²¹ Through these programs, Illinois and New York seek to preserve nuclear power as a carbon-free electricity generation resource.²² Illinois designated two Exelon nuclear facilities to participate in its ZEC program.²³ New York selected three Exelon nuclear facilities on the basis of the plants’ “public necessity,” their historic contributions to the state’s clean energy mix, and their inability to remain profitable under prevailing market conditions.²⁴ The qualifying plants in Illinois

20. 20 ILL. COMP. STAT. 3855 (2017) (enacting § 1-75(d-5) of the Illinois Power Agency Act, establishing the Zero Emission Standard); see also *Changes Coming to the IPA*, ILL. POWER AGENCY (2018), <https://perma.cc/KS8H-2HPA>.

21. Order Adopting a Clean Energy Standard, N.Y. PUB. SERV. COMM’N, Cases No. 15-E-0302 & 16-E-0270, at 152–57 (2016) [hereinafter *New York Clean Energy Standard*], <https://perma.cc/7JWT-P8NG>. The New York Clean Energy Standard also establishes a REC program. *Id.* at 154.

22. See 20 ILL. COMP. STAT. 3855 §1-5 (noting need to “maintain and support development of . . . zero emission facilities”); see also *New York Clean Energy Standard*, *supra* note 21, at 1 (noting state action is necessary “to preserve existing zero-emissions nuclear generation resources as a bridge to the clean energy future”).

23. NUCLEAR ENERGY INST., ZERO EMISSION CREDITS 6 (2018), <https://perma.cc/EZ94-UUC4>.

24. See *New York Clean Energy Standard*, *supra* note 21, at 50; see also *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 45–46 (2d Cir. 2018).

and New York would have shut down but for enactment of the ZEC programs.²⁵

ZECs, like other energy support mechanisms such as RECs, seek to assign economic value to the emission-free attribute of particular generation resources. Qualifying nuclear facilities generate a tradable product—a ZEC—with each megawatt hour (“MWh”) of energy output.²⁶ To meet state emission targets, the state agency administering the ZEC program contracts to buy ZECs from selected nuclear facilities and sells those ZECs to load-serving entities. The dollar-per-MWh price of each ZEC is the product of a federal estimate of the social cost of carbon (in dollars per metric ton of CO₂) and the estimated CO₂ emissions avoided (in metric tons per MWh of nuclear generator output).²⁷ This price reflects the societal cost-savings of using one MWh of carbon-free electricity generation, facilitating the internalization of emissions-related externalities.²⁸ ZEC prices can be adjusted downward for forecasted electricity market price increases. For example, in Illinois, if the market price index reflecting forecasted energy and capacity prices exceeds a baseline index of past energy and capacity prices, the price of a ZEC falls.²⁹ The New York ZEC price is further reduced to reflect Regional Greenhouse Gas Initiative (“RGGI”) CO₂ allowance revenues.³⁰

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25. See NUCLEAR ENERGY INST., *supra* note 23, at 4, 6; see also *EPSA v. Star*, 904 F.3d 518, 521 (7th Cir. 2018).
 26. See 20 ILL. COMP. STAT. 3855 §1-10 (defining “zero emission facility” as a facility both (1) fueled by nuclear power, and (2) interconnected with PJM or MISO); see also New York Clean Energy Standard, *supra* note 21, at 19–20 (specifying that “qualifying nuclear facilities” can sell ZECs).
 27. 20 ILL. COMP. STAT. 3855 §1-75(d-5)(1)(B); New York Clean Energy Standard, *supra* note 21, at 136. For a discussion on estimating the social cost of carbon, see INTERAGENCY WORKING GRP. ON SOCIAL COST OF CARBON, TECHNICAL SUPPORT DOCUMENT: SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12,866, at 26 (2010), <https://perma.cc/Q8NY-ZMFT>; NAT’L ACAD. SCI., ENG’G, & MED., VALUING CLIMATE DAMAGES: UPDATING ESTIMATION OF THE SOCIAL COST OF CARBON DIOXIDE 5–20 (2017), <https://perma.cc/QSM2-XW6Q>.
 28. ZECs are typically referred to as subsidies: government support intended to aid nuclear power as an “enterprise deemed advantageous to the public.” *Subsidy*, MERRIAM-WEBSTER.COM DICTIONARY (2019), <https://perma.cc/6N4C-CC4Z>. However, a broader purpose to value generators’ environmental attributes underpins ZEC programs, and the term “subsidy” often carries a narrow and negative connotation. See, e.g., Warren C. Robinson, *What is a Government Subsidy?*, 20 NAT’L TAX J. 86, 86 (1967).
 29. For each \$1/MWh by which the market price index exceeds the baseline index, the price of a ZEC is reduced below the social cost of carbon by \$1/MWh. If the market price index sufficiently exceeds the baseline index, the ZEC price can fall to zero, though the Illinois statute also includes a provision to increase the ZEC price by \$1/MWh each year beginning in 2023. See 20 ILL. COMP. STAT. 3855 §1-75(d-5)(1)(B). New York has an analogous market-price adjustment. See New York Clean Energy Standard, *supra* note 21, at 138–41.
 30. New York Clean Energy Standard, *supra* note 21, at 130.

State ZEC programs can affect outcomes and rates in interstate wholesale capacity markets. Because a ZEC-supported resource receives revenue from ZEC sales, it may lower its capacity offer price. This enables those nuclear generators that may not have cleared the capacity market absent ZECs to do so (R5 in Figure 2). This can lower the market-clearing price and therefore auction revenues for other generators that clear (R1–R3 in Figure 2), reduce some generators' cleared output (R3 in Figure 2), and displace some generators entirely (R4 in Figure 2).

Figure 2(a) — Capacity market-clearing without ZECs (unsubsidized nuclear generator does not clear auction); same as Figure 1

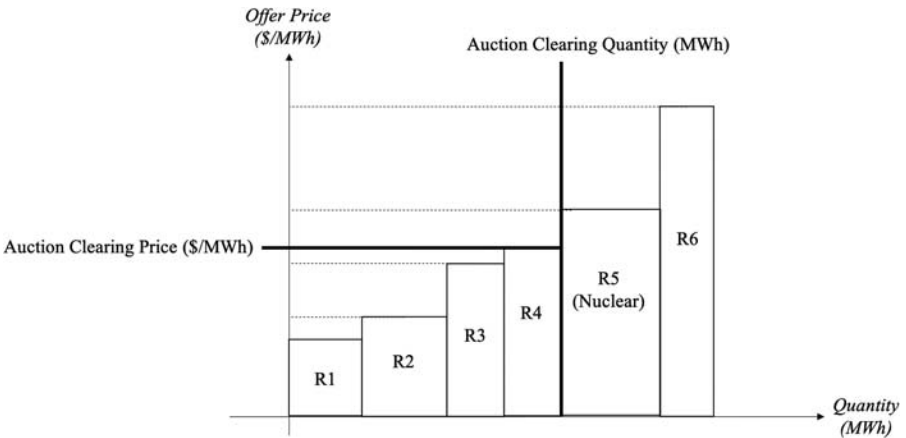
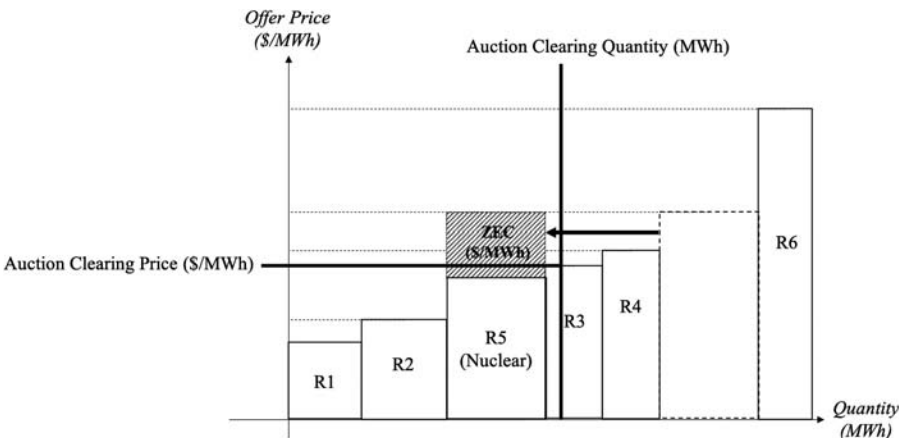


Figure 2(b) — Capacity market-clearing with ZECs (subsidized nuclear generator clears auction)



C. Defining the Reach of Federal Jurisdiction Over Wholesale Rates

Courts have grappled with the scope of FERC's wholesale rate jurisdiction as it relates to ZEC programs and other state energy support policies. The FPA provides that rates "for or in connection with" FERC-jurisdictional electricity transmission or sales, and, all "rules and regulations affecting or pertaining to such rates or charges" must be just and reasonable (and so regulated by FERC).³¹ To distinguish federal jurisdiction over capacity markets and state jurisdiction over generation, courts have separated *direct* from *indirect* market effects, and *policy-mandated* from *optional* wholesale market participation.

The latter distinction was adopted in *Hughes v. Talen Energy Marketing, LLC*.³² In *Hughes*, the Supreme Court struck down a Maryland policy to support new generation capacity as preempted because the support was conditioned upon wholesale capacity market participation.³³ This market participation requirement, combined with a state-guaranteed contract price that differed from the capacity market clearing price, amounted to "adjusting an interstate wholesale rate [and thereby] invading FERC's regulatory turf."³⁴ The Supreme Court noted in *Hughes* that its holding was limited, and that the opinion should not "be read to foreclose Maryland and other States from encouraging production of new or clean generation through measures untethered to a generator's wholesale market participation."³⁵ However, in *FERC v. EPSA*, the Court held that "[t]he FPA 'leaves no room either for direct state regulation of the prices of interstate wholesales' or for regulation that 'would indirectly achieve the same result.'"³⁶ The Court's holdings thus far do not clearly establish what amounts to indirect state regulation of wholesale prices. The *EPSA v. Star* and *Coalition* courts relied on *Hughes* to conclude that because receipt of ZECs is not conditioned upon generator participation in wholesale markets, the ZEC programs do not directly alter or affect wholesale electricity rates, and therefore, they do not impinge upon FERC authority.³⁷ This lack of "tethering" to wholesale market participation avoids the "fatal defect" that yielded Maryland's preemption.³⁸

31. 16 U.S.C. § 824d(a) (2012).

32. 136 S. Ct. 1288 (2016).

33. *See id.* at 1299.

34. *Id.* at 1297.

35. *Id.* at 1299 (internal citations omitted).

36. 136 S. Ct. 760, 780 (2016) (quoting *N. Nat. Gas Co. v. State Corp. Comm'n of Kan.*, 372 U.S. 84, 91 (1963)) (emphasis added).

37. *See Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 50–51 (2d Cir. 2018) ("The Maryland contract-for-differences program insulated generators from fluctuations in wholesale prices by guaranteeing [a contract price]. New York's scheme avoids (or skirts) the *Hughes* prohibition.") (internal citations omitted); *see also EPSA v. Star*, 904 F.3d 518, 523 (7th Cir. 2018).

38. *Compare Hughes*, 136 S. Ct. at 1299 *with Zibelman*, 906 F.3d at 52.

II. FORMAL JUDICIAL VICTORIES FOR STATE ZEC PROGRAMS

A. Electric Power Supply Association v. Star (7th Cir. 2018)

In 2017, the Electric Power Supply Association (“EPSA”), a trade association of electric power producers and marketers, challenged the constitutionality of Illinois’s ZEC program. EPSA contended that out-of-market payments to wholesale generators amounted to state regulation “in connection with” electricity wholesale, and were therefore preempted by the FPA.³⁹ EPSA further asserted that the ZEC program suppressed PJM and MISO capacity market prices and enabled selected generators to circumvent “just and reasonable” wholesale market outcomes.⁴⁰ EPSA noted that this effect on wholesale prices conflicted with federal wholesale regulation.⁴¹ Finally, EPSA contended that ZECs discriminated against out-of-state generators in violation of the dormant Commerce Clause.⁴²

The U.S. District Court for the Northern District of Illinois granted a motion to dismiss by defendants (the Director of the Illinois Power Agency and the Commissioners of the Illinois Commerce Commission) and intervenor Exelon.⁴³ On appeal, EPSA renewed its preemption and dormant commerce clause challenges. Writing for a three-judge panel, Judge Easterbrook delivered the Seventh Circuit’s affirmation of the district court.⁴⁴ In concluding that the Illinois statutory ZEC program is not preempted, the court relied, in part, upon an amicus brief it solicited from FERC to understand the agency’s view of its own regulatory authority.⁴⁵

In their amicus brief, FERC and the Department of Justice asserted that state ZEC programs were not preempted because they did not mandate generator wholesale market participation (i.e., generators can obtain ZEC payments without clearing a wholesale market), and thus did not interfere with FERC jurisdiction over wholesale markets.⁴⁶ FERC noted that not every “spillover, indirect effect on wholesale electricity markets” calls for the “blunt remedy of

39. See Brief for Plaintiffs-Appellants at 39–41, *EPSA v. Star*, 904 F.3d 518 (No. 17-2445) (asserting field preemption).

40. See *id.* at 57–58 (asserting conflict preemption).

41. *Id.*

42. See *id.* at 3–4.

43. *Vill. of Old Mill Creek v. Star*, No. 17-CV-1163, 2017 WL 3008289, at *18 (N.D. Ill., 2017), *aff’d sub nom EPSA v. Star*, 904 F.3d 518 (7th Cir. 2018), *reh’g denied* (Oct. 9, 2018), *cert. denied*, 139 S. Ct. 1547 (U.S. Apr. 18, 2019).

44. Judge Easterbrook was joined by Judge Sykes and by Southern District of Illinois Chief Judge Reagan, who was sitting on the panel by designation.

45. *EPSA v. Star*, 904 F.3d at 522.

46. See FERC Brief, *supra* note 4, at *7. FERC did not address the dormant commerce clause issue in its brief.

preemption.”⁴⁷ The Seventh Circuit agreed, concluding that invalidating all state measures that alter “aggregate generation capacity, or affect the price of energy” would run counter to the federalism principles underpinning the FPA.⁴⁸ The court adopted the view that Illinois’s program had *indirect* effects on wholesale markets and is therefore not preempted.⁴⁹

The Seventh Circuit’s opinion acknowledged the inherent interaction of state and federal regulatory reach.⁵⁰ The court was seemingly comfortable with FERC’s stipulation that the Commission retained authority to rectify any harmful effects on wholesale markets, should any in fact result, from state generation support policies.⁵¹ Indeed, FERC’s ongoing PJM capacity market proceedings exemplify the Commission’s task to address the impact of state energy policies on wholesale market design and operation.⁵²

B. Coalition for Competitive Electricity v. Zibelman (2d Cir. 2018)

The New York ZEC program also faced legal challenges from generators and generation trade associations (including EPSA) on preemption and dormant commerce clause grounds.⁵³ The U.S. District Court for the Southern District of New York granted a motion to dismiss by defendants (members of the New York PSC) and intervenor Exelon.⁵⁴ On appeal, generators renewed their constitutional claims.⁵⁵ Also writing for a three-judge panel, Judge Jacobs delivered the Second Circuit’s affirmation of the district court.⁵⁶ The Second Circuit noted that a clear statement of congressional intent to displace state authority is required to overcome a strong presumption against finding preemption by the FPA.⁵⁷

47. *Id.* at 7, 20.

48. *See EPSA v. Star*, 904 F.3d at 524–25.

49. *Id.* at 524.

50. *Id.* at 523.

51. *Id.* at 523–24; *see also* FERC Brief, *supra* note 4, at *20 (“If such programs, in fact, impair FERC-jurisdictional wholesale capacity markets, the solution lies with the Commission, not with courts.”). Notably, FERC’s position has evolved since *Hughes*. *See* Brief for the United States as Amicus Curiae at 18, *Hughes v. Talen Energy Mktg, LLC*, 136 S. Ct. 1288 (2016) (Nos. 14-614, 14-623), 2016 WL 344494, at *13.

52. *See, e.g.*, FERC Brief, *supra* note 4, at *6.

53. *Coal. for Competitive Elec. v. Zibelman*, 272 F. Supp. 3d 554, 559 (S.D.N.Y. 2017), *aff’d sub nom* *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41 (2d Cir. 2018), *cert. denied sub nom* *Elec. Power Supply Ass’n v. Rhodes*, 139 S. Ct. 1547 (U.S. Apr. 18, 2019).

54. *Id.*

55. *See Zibelman*, 906 F.3d at 45–46.

56. Judge Jacobs was joined by Judge Livingston and Judge Chen of the Eastern District of New York, who was sitting on the panel by designation.

57. *See Zibelman*, 906 F.3d at 50.

To explain why federal occupation of the field of wholesale rate regulation does not preempt the New York ZEC program, the court drew distinctions between: (1) tying subsidies to market *participation* (prohibited) versus market *prices* (permitted); (2) state regulation of bulk *sales* (prohibited) versus *production* (permitted); and (3) selling RECs (and by extension, ZECs) in a single transaction *bundled* with wholesale electricity sales (prohibited) versus unbundled from wholesale electricity sales (permitted).⁵⁸ The Second Circuit hearkened to FERC's order in *WSPP, Inc.* to distinguish sales of energy credits bundled with electricity sales from sales of energy credits unbundled from electricity sales.⁵⁹ The court noted that FERC itself concluded in *WSPP* that sales of RECs unbundled from electricity sales were not "in connection with" wholesale sales and did not affect wholesale rates.⁶⁰ The court concluded that the New York ZEC program ties ZEC prices to market *prices*, regulates an attribute of *production*, and sells ZECs in a manner *unbundled* from wholesale electricity sales—none of which warrant preemption.

Finding that any role ZECs play in lowering wholesale prices "is (at best) incidental" and arises from state regulation of production, the court held that ZECs do not interfere with New York ISO ("NYISO") wholesale prices and do not frustrate federal regulation.⁶¹ The court cautioned that FERC's "affecting jurisdiction is limited to 'rules or practices that *directly* affect the [wholesale] rate' so that FERC's jurisdiction does not 'assum[e] near-infinite breadth.'"⁶² In fact, the Second Circuit observed that the FPA was written in anticipation of state policy effects on wholesale markets; thus, New York ZEC effects on NY-ISO prices *cannot* conflict with federal objectives.⁶³

In January 2019, EPSA filed petitions for writs of certiorari, seeking the Supreme Court's review of the Seventh and Second Circuit decisions.⁶⁴ In April 2019, the Supreme Court denied certiorari,⁶⁵ making the FERC *Calpine* capac-

58. *See id.* at 51–55. For example, the court used the indexing of ZEC prices to the social cost of carbon and *estimates* of wholesale prices to conclude that ZEC facilities do not receive a guaranteed payment entirely insulated from market price variations. *See id.*

59. *See id.* at 55 (citing *WSPP Inc.*, 139 FERC ¶ 61,061 (Apr. 20, 2012) (finding that RECs are sufficiently connected with wholesale markets only if the sale of the REC and the electricity occur in a single transaction)).

60. *Id.* (quoting *WSPP Inc.*, 139 FERC ¶ 61,061, para. 24).

61. *Id.* at 57.

62. *Id.* at 50 (quoting *FERC v. EPSA*, 136 S. Ct. 760, 774 (2016) (emphasis and alteration in original)).

63. *See id.* at 57.

64. *See* Petition for Writ of Certiorari, *Electric Power Supply Ass'n v. Rhodes*, (No. 18-879) 139 S. Ct. 1547 (U.S. Apr. 18, 2019); Petition for Writ of Certiorari, *Electric Power Supply Ass'n v. Star*, (No. 18-868) 139 S. Ct. 1547 (U.S. Apr. 18, 2019).

65. *Electric Power Supply Ass'n v. Rhodes*, 139 S. Ct. 1547 (U.S. Apr. 18, 2019); *Electric Power Supply Ass'n v. Star*, 139 S. Ct. 1547 (U.S. Apr. 18, 2019).

ity market proceeding the remaining adjudicative determinant of the fate of ZECs.

III. FUNCTIONAL ADMINISTRATIVE UNCERTAINTY FOR STATE ZEC PROGRAMS

A. *Ongoing FERC Capacity Market Proceedings*

FERC now faces the task of identifying which state subsidies affect wholesale capacity markets and how, if at all, to account for those effects in wholesale market design. In its *EPSA v. Star* brief, FERC described two capacity market design proceedings (the closed ISO New England proceeding and the ongoing PJM proceeding) to counter assertions of conflict preemption by demonstrating that the Illinois ZEC program does not interfere with FERC's ability to regulate wholesale markets.⁶⁶

First, the Commission pointed to its recent approval of the ISO New England ("ISO-NE") plan incorporating: (1) a minimum offer price rule ("MOPR") that does not exempt state-supported resources and (2) allowance for state-supported generation to participate in the second stage of a two-stage capacity auction.⁶⁷ However, the *ISO New England* Order reveals that the Commissioners had not converged upon agreement about "the interplay of state policies and wholesale markets."⁶⁸ Commissioner LaFleur submitted a concurring opinion cautioning against broad application of the Commission's *ISO New England* Order.⁶⁹ Commissioner Powelson dissented on the basis of his belief that the ISO-NE capacity market plan cannot achieve its stated goal of balancing two fundamentally contradictory objectives: enabling state policy goals while simultaneously ensuring the efficacy of capacity markets.⁷⁰ Commissioner Glick, dissenting in part and concurring in part, counseled against interpreting the *ISO New England* Order to mean that FERC must adjust wholesale market rules for any and all state support policies.⁷¹ This divergence

66. See FERC, *supra* note 4, at *20–22.

67. *Id.* at *20–21 (discussing ISO New England Inc., 162 FERC ¶ 61,205 (Mar. 9, 2018)). "[S]tate sponsored" resources can participate in the substitution stage to replace capacity resources that clear the primary stage. Upon replacement, the primary stage resources exit New England wholesale markets entirely. This design seeks to prevent excess generation capacity and market price suppression. See *ISO New England Inc.*, 162 FERC ¶ 61,205, para. 3–7.

68. See FERC Brief, *supra* note 4, at *20; see also *ISO New England, Inc.*, 162 FERC ¶ 61,205.

69. Separate statement of Comm'r LaFleur, concurring at 1–2, *attached to ISO New England Inc.*, 162 FERC ¶ 61,205.

70. Separate statement of Comm'r Powelson, dissenting at 1, *attached to ISO New England Inc.*, 162 FERC ¶ 61,205.

71. Separate statement of Comm'r Glick, dissenting in part and concurring in part at 1, *attached to ISO New England Inc.*, 162 FERC ¶ 61,205.

of views about the appropriate role of FERC and ISOs in adjusting for wholesale effects of state policies sets the stage for FERC's ongoing review of PJM's capacity market rule reforms.

The PJM (or *Calpine*) proceeding began in 2016, when a group of generation companies filed a complaint asserting that PJM's MOPR, which applies only to new natural gas plants, fails to consider market price suppression by subsidized market participants.⁷² The Commission consolidated the generators' complaint with PJM-proposed tariff updates.⁷³ PJM's proposal called for either employing a two-stage capacity auction to replace the MOPR or extending the MOPR to new and existing state-supported resources.⁷⁴

In its 2018 Order, the Commission rejected both of PJM's proposals, concluding that the two-stage capacity auction is unjust and unreasonable⁷⁵ and that PJM failed to meet its burden of demonstrating that the extended MOPR is not unjust, unreasonable, or unduly discriminatory.⁷⁶ While the Commission did not put forth a definitive alternative to PJM's capacity tariff, it suggested that an alternative incorporating (1) an expanded MOPR with "few to no exemptions" and (2) an option for supported resources—and a corresponding amount of load—to exit the market altogether, may be acceptable to the Commission.⁷⁷ The Commission set the matter for paper hearing and anticipated issuing a decision on replacement capacity market rules by early 2019.⁷⁸

While the 2018 *Calpine* Order did not settle on replacement market rules, it articulated a clear conclusion that out-of-market supports, such as ZECs and RECs, are sufficient in number and magnitude to *affect* PJM capacity market prices.⁷⁹ The Commission noted that evidence adequately demonstrates that "state-subsidized resources . . . can cause significant price suppression."⁸⁰ This is precisely the type of wholesale effect that FERC said it could regulate as needed in its *EPSA v. Star* brief.⁸¹ The *Calpine* majority viewed FERC author-

72. See *Calpine Corp. v. PJM Interconnection LLC*, 163 FERC ¶ 61,236, para. 3 (June 29, 2018) (Order Rejecting Proposed Tariff Revisions, Granting in Part and Denying in Part Complaint, and Instituting Proceeding Under Section 206 of the Federal Power Act).

73. *Id.* at para. 4.

74. *Id.* at para. 20, 73–78. The PJM proposal refers to the two alternatives as "Capacity Repricing" (the two-stage auction) and "MOPR-Ex" (the extended minimum offer price). *Cf. supra* note 67 and accompanying text (describing the ISO New England proposal).

75. See *id.* at para. 64.

76. See *id.* at para. 100–01.

77. *Id.* at para. 157–60, 167.

78. *Id.* at para. 8, 172.

79. *Id.* at para. 151–53 ("[W]e find here that the increase in programs providing out-of-market support, such as ZEC programs, has changed the circumstances in PJM, such that it is no longer possible to distinguish the treatment of new and existing resources in the context of PJM's MOPR.").

80. *Id.* at para. 158.

81. See FERC Brief, *supra* note 4, at *7, *20.

ity over wholesale sales, rates, and rules affecting such rates as clearly encompassing authority to develop market rules that compensated for the effects of state generation supports.⁸²

However, Commissioner Glick's *Calpine* dissent strengthened his caution from *ISO New England* and fundamentally questioned the majority's objective to alter state policies' market effects. He stated that "[t]he Commission's role is not—and should not be—to exercise its authority over wholesale rates in a manner that aims to mitigate, frustrate, or otherwise limit the states' exercise of their exclusive authority over electric generation facilities."⁸³ Commissioner Glick characterized the majority's endeavor as one of interference with state climate policies, antithetical to the Commission's task of "accomodat[ing] and giv[ing] effect to those state initiatives."⁸⁴ He cautioned that the Commission's efforts to preserve competition in capacity markets, if taken to their logical ends, would require valuing all environmental attributes of generation resources at zero.⁸⁵ In contrast, Commissioner LaFleur's dissent did not question the premise that state support impacts warrant alterations to capacity market rules. She pointed approvingly to the Commission's review and acceptance of ISO New England's plan,⁸⁶ but underscored the need for FERC to engage with ISO member-states before significantly altering market design.⁸⁷

B. *What FERC's PJM Capacity Market Proceeding Could Mean for State ZEC Programs*

In light of *EPSA v. Star* and *Coalition*, the PJM capacity market proceedings underscore three conclusions pertinent to ZECs and similar state energy policies.

82. See Federal Power Act § 205(a), 16 U.S.C. § 824d(a) (2012) (establishing FERC's jurisdiction over all rates "made, demanded, or received by any public utility").

83. See Separate Statement of Comm'r Glick, dissenting at 1, *attached to Calpine Corp.*, 163 FERC ¶ 61,236 (June 29, 2018).

84. *Id.* at 2.

85. *Id.* at 12. Commissioner Glick points to the Commission's own articulation—in its *EPSA v. Star* brief—of FERC jurisdiction relative to states: "[State] public policies, including . . . [ZECs] focus on the significant externalities associated with electricity generation. . . . Addressing these externalities is at the core of the authority over 'generation facilities' that Congress gave to the states when it enacted the FPA. Accordingly, the Commission should, consistent with the federalist design of the statute, accommodate and facilitate those state efforts." *Id.* at 4 (citing FERC Brief, *supra* note 4, at *10).

86. See Separate Statement of Comm'r LaFleur, dissenting at 2–3, *attached to Calpine Corp.*, 163 FERC ¶ 61,236.

87. See *id.* at 3.

First, FERC's authority to regulate wholesale effects of state policies can dull the results that states seek from such policies.⁸⁸ The very authority retained by FERC that saved ZECs from preemption can enfeeble ZECs and other supports. Commissioner Glick's dissent in the *Calpine* Order reflects this concern: by broadly exercising its authority to regulate wholesale capacity market rules, FERC risks trammeling states' authority over electricity generation facilities, thus rendering futile—in practical effect—states' efforts to support particular generation resources. This practical implication risks undermining the delicate balance of federalism that the Seventh Circuit, the Second Circuit, and the Supreme Court sought to maintain in *EPSA v. Star, Coalition*, and *Hughes*, respectively.⁸⁹ For example, a MOPR that applies to all resources receiving out-of-market payments will limit the ability of supported resources to reflect those payments in market bids and restrict their market participation.⁹⁰ Excluding state-supported resources from capacity markets may also require ratepayers to pay both for state support policies *and* for resources that clear the market.⁹¹ In this way, modifying capacity market rules to account for state-supported resources can “undermine state clean energy policy preferences” and raise costs of achieving state clean energy goals.⁹²

Second, FERC is endeavoring to exercise its authority to oversee efficient functioning of competitive wholesale markets while respecting state authority.⁹³ By interpreting the FPA as permitting state ZEC programs and simultaneously permitting federal wholesale market regulation that accounts for such programs, FERC adopted (in its *EPSA v. Star* brief) what has been described as a

88. That power can also be used to bolster state energy policies, as discussed in the next paragraph.

89. See *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1297 (2016); *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 46 (2d Cir. 2018); *Elec. Power Supply Ass'n v. Star*, 904 F.3d 518, 524 (7th Cir. 2018).

90. See *Calpine Corp.*, 163 FERC ¶ 61,236, para. 8.

91. ISO New England Inc. Transmittal Letter at 4, 162 FERC ¶ 61,205 (2018) (ER18-619-000) (citing NEW ENGLAND STATES COMM. ON ELEC., POLICIES AND MARKETS PROBLEM STATEMENT 2 (2016), <https://perma.cc/8SLB-L8M6>).

92. Danny Cullenward & Shelley Welton, *The Quiet Undoing: How Regional Electricity Market Reforms Threaten State Clean Energy Goals*, 36 YALE J. ON REG. BULL. 106, 121–23 (2018) (describing the potential risks to states' clean energy goals and energy federalism posed by wholesale capacity market reforms).

93. The scope of FERC's authority to ensure that electricity rates are just and reasonable has expanded to “enhancing competition” in wholesale electricity markets. See *FERC v. EPSA*, 136 S. Ct. 760, 768 (2016). While FPA § 201 expressly denies FERC authority to regulate generation facilities, courts have held that regulation of capacity markets is not regulation of generation facilities. See Ari Peskoe, *Easing Jurisdictional Tensions by Integrating Public Policy in Wholesale Electricity Markets*, 38 ENERGY L.J. 1, 17 (2017).

pragmatic approach to the FPA's federal-state jurisdictional divide.⁹⁴ Meanwhile, though courts recognize the challenge of ascertaining the FPA's jurisdictional boundaries,⁹⁵ judicial doctrine relies more upon formal distinctions—such as tethered/untethered subsidies and bundled/unbundled sales—to demarcate the respective scopes of FERC wholesale authority and state generation authority.⁹⁶ Such formal distinctions are of limited functional import if effects on wholesale prices, such as those identified in *ISO New England* and *Calpine*, trigger federal regulation of capacity market rules to “correct-for” state support policies. The solution to greater regulatory participation by states may lie not in clearly delineating respective state and federal roles, but rather, as scholars have suggested, in expanding FERC's role to “integrat[e] markets and public policies.”⁹⁷ By expanding its role in this way, FERC can enhance state participation by “reorienting traditional state authority over generation facilities so that it is given *meaningful effect* within RTO markets.”⁹⁸

Third, the Commission is far from unanimous in its views about how—and whether—to alter capacity market rules in response to state out-of-market support. Despite the Seventh Circuit's reliance on FERC's position that ZEC programs do not impede FERC's ability to regulate wholesale market rates and rules, the Commission has not settled its interpretation of the scope of that authority vis-à-vis state generation policies.⁹⁹ It is unclear whether the current or future Commissioners—particularly in light of changing Commission composition since the *Calpine* proceedings began¹⁰⁰—will converge or diverge in their views.

94. See Matthew Christiansen, *FERC v. EPSA: Functionalism and the Electricity Industry of the Future*, 68 STAN. L. REV. ONLINE 100, 101 (2016) (describing this pragmatic or “functional” approach as one endorsed by the Supreme Court in *FERC v. EPSA*).

95. See, e.g., *FERC v. EPSA*, 136 S. Ct. at 766 (noting the FPA's “statutory division generates a steady flow of jurisdictional disputes because—in point of fact if not of law—the wholesale and retail markets in electricity are inextricably linked”); *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1300 (2016) (Sotomayor, J., concurring) (noting the FPA “envisions a federal-state relationship marked by interdependence”).

96. See *Elec. Power Supply Ass'n v. Star*, 904 F.3d 518, 524 (7th Cir. 2018); see also *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 53, 57 (2d Cir. 2018).

97. See Peskoe, *supra* note 93, at 40.

98. *Id.* (emphasis added).

99. 16 U.S.C. § 824d(a) (2012).

100. Since FERC issued its June 29 *Calpine* Order, two Commissioners have departed from the Commission's ranks. See News Release, FERC, FERC Announces Passing of Chairman Kevin J. McIntyre (Jan. 3, 2019), <https://perma.cc/7T49-XLE4>; Statement, Robert F. Powellson, Commissioner, FERC (June 28, 2018), <https://perma.cc/9ZRM-2SL3>. One Commissioner announced departure plans. See Gavin Bade, *FERC's LaFleur to Step Down After Push from Senate Democrats*, UTILITY DIVE (Feb. 1, 2019) <https://perma.cc/2442-YX5M>. One new Commissioner was confirmed. See News Release, FERC, Senate Votes to Confirm McNamee to FERC (Dec. 6, 2018), <https://perma.cc/DLQ6-3L94>.

CONCLUSION

While the *EPSA v. Star* and *Coalition* holdings bolster state authority to support resources that participate in wholesale electricity markets, the decisions do not fully secure states' grip on their energy generation mix.

Though FERC's authority to regulate interstate electricity wholesale does not preempt state energy support policies, such policies are nonetheless susceptible to administrative determinations about capacity market design.¹⁰¹ The rules governing capacity markets can determine the financial viability of generation resources, the impact of support policies, and, as a result, state generation mixes. Disputes over capacity market design have arisen precisely because of generators' concerns about continued profitability in markets spanning states with increasingly ambitious energy and climate policies. Having successfully passed the formal test of preemption, ZECs and comparable policies now face a test of functional import in wholesale markets. FERC's ongoing PJM capacity market proceeding delimits the new battlefield for determining the fate of state clean energy support policies.

101. FERC's administrative determinations are subject to judicial review; however, courts may grant substantial deference to FERC's interpretation of its authority to regulate wholesale market rates if well-supported by an administrative record. *See, e.g.*, Sharon Jacobs, *Energy Deference*, 40 HARV. ENVTL. L. REV. F. 49, 53 (2016) (describing "super deference" to agency technical decisions within an agency's realm of expertise or to agency interpretations of some authorizing statutes); Peskoe, *supra* note 93, at 8, 12.

