



COLUMBIA LAW SCHOOL

SABIN CENTER FOR CLIMATE CHANGE LAW

October 1, 2018

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

VIA ELECTRONIC SUBMISSION

Re: PJM Interconnection, L.L.C. Section 206 Proceeding (Docket No. EL18-178-000)

Dear Secretary Bose,

The Sabin Center for Climate Change Law submits these comments in response to the Federal Energy Regulatory Commission (“FERC”)’s request for input on proposed revisions to PJM Interconnection, L.L.C (“PJM”)’s tariff. The tariff revisions are intended to address the purported impact of state policies “supporting the entry or continued operation of preferred generation resources” on PJM’s wholesale capacity market.¹ The Sabin Center’s comments elaborate on the following points in relation to the state policies and FERC’s proposal to address their impact:

1. The policies at issue were adopted by states pursuant to their exclusive authority to regulate electricity generation. As FERC has itself recognized, adoption of the policies did not intrude upon federal regulation of wholesale electricity sales.
2. In exercising its authority over wholesale electricity sales, FERC must strive to accommodate validly adopted state policies which do not impede federal regulation. FERC does not have authority to over-ride, or otherwise interfere with the operation of, valid state policies.
3. Unless implemented with care, FERC’s proposed tariff revisions could interfere with the operation of state clean energy policies, effectively preventing states from exercising their authority over generation. This would be impermissible under law and, if allowed to move forward, could have far reaching economic and other impacts.

¹ Calpine Corporation v. PJM Interconnection, L.L.C., 163 FERC ¶ 61,236 (June 29, 2018) [hereinafter FERC PJM Order].

I. The State Policies at Issue Were Validly Adopted and Do Not Intrude Upon an Area of Federal Jurisdiction

It is beyond dispute that, in enacting the Federal Power Act (“FPA” or “Act”), Congress intended to divide regulatory authority over the electricity system between federal and state regulators.² At the federal level, FERC is authorized to regulate “the transmission of electric energy in interstate commerce,” and “the sale of electric energy at wholesale in interstate commerce.”³ The FPA confers on FERC “jurisdiction over all facilities for such transmission or sale of electric energy.”⁴ The Act is clear, however, that FERC’s jurisdiction does not extend to “facilities used for the generation of electric energy.”⁵ The regulation of those facilities is reserved to the states, which have been held to have broad authority over all aspects of electricity generation, from approving new facilities to regulating their construction and operation.⁶

The courts have repeatedly upheld state attempts to shape the generation mix – e.g., to achieve environmental outcomes – as a valid exercise of the authority reserved to them under the FPA.⁷ State authority has been held to extend to the establishment of policies providing out-of-market payments to generators with certain environmental attributes.⁸ Most relevantly, in *Electric Power Supply Association v. Star*, the U.S. Court of Appeals for the Seventh Circuit upheld an Illinois program intended to support nuclear generators by compensating them for their zero emission attributes (“zero emission credit” or “ZEC” program).⁹ The court concluded that adoption of the program fell squarely within the state’s authority, emphasizing that it dealt with electricity

² Federal Power Act, § 201(b)(1); 16 U.S.C. § 824(b)(1). *See also* FERC v. Electric Power Supply Assoc., 136 S. Ct. 760, 766-767 (2016) (noting that there is a “statutory division” of authority between the federal government and the states as, while the FPA grants FERC certain authority, it “also limits FERC’s regulatory reach, and thereby maintains a zone of exclusive state jurisdiction”); Hughes v. Talen Energy Mktg., LLC, 136 S. Ct. 1288, 1300 (2016) (Sotomayor, J., concurring) (indicating that “the Federal Power Act, like all collaborative federalism statutes, envisages a federal-state relationship marked by interdependence”); Vill. of Old Mill Creek v. Star, 2017 U.S. Dist. LEXIS 109368 (N.D. Ill. 2017) (stating that the FPA “allows both the Federal Energy Regulatory Commission and the states to regulate aspects of the electricity industry”); Coal. for Competitive Elec. v. Zibelman, 2018 U.S. App. LEXIS 27605, 6 (2d Cir. 2018) (noting that “[t]he FPA establishes a collaborative scheme between the states and federal government to regulate electricity generation”); Elec. Power Supply Ass’n v. Star, 2018 U.S. App. LEXIS 25980, 12 (7th Cir. 2018) (reiterating that the FPA “divides regulatory authority between states and the FERC).

³ Federal Power Act, § 201(b)(1); 16 U.S.C. § 824(b)(1).

⁴ *Id.*

⁵ *Id.*

⁶ *See e.g.*, Pacific Gas & Electric Company v. State Energy Resources Conservation Development Commission, 461 U.S. 190, 205 (1983) (holding that the “[n]eed for new power facilities, their economic feasibility, and rates and services, are areas that have been characteristically governed by the States”); Conn. Dep’t of Pub. Util. Control v. FERC, 569 F.3d 477, 481 (D.C. Cir. 2009) (holding that states have authority “to require retirement of existing generators, to limit new construction to more expensive, environmentally-friendly units, or to take any other action in their role as regulators of generation facilities without direct interference from” FERC).

⁷ *See e.g., id.*; Vill. of Old Mill Creek, 2017 U.S. Dist. LEXIS 109368; Zibelman, 2018 U.S. App. LEXIS 27605; Star, 2018 U.S. App. LEXIS 25980.

⁸ Coal. for Competitive Electricity v. Zibelman, 272 F. Supp. 3d 554, 570 (S.D.N.Y. 2017) (holding that “the regulation of [generators’] environmental attributes[] is within the zone of state jurisdiction”).

⁹ Star, 2018 U.S. App. LEXIS 25980.

generation, the regulation of which is reserved to the states under the FPA.¹⁰ The same reasoning also applies to state renewable energy credit (“REC”) programs that compensate generators for their renewable energy attributes.¹¹

FERC has itself recognized that states are free to adopt REC, ZEC, and other similar programs and do not encroach upon federal regulatory authority by doing so.¹² However, FERC now appears to have changed its view, suggesting that state programs may interfere with its regulation of wholesale electricity sales. FERC’s concern stems from the alleged potential for state programs to suppress wholesale market prices.¹³ Even if such a potential existed, which is not at all clear (as discussed in part II below), it does not render the state programs invalid.

In *Hughes v. Talen Energy Marketing, LLC* (“Hughes”), the Supreme Court recognized that states “may regulate within the domain Congress assigned to them even when their laws incidentally affect areas within FERC’s domain.”¹⁴ Applying this reasoning, in *Village of Old Mill Creek v. Star*, the U.S. District Court for the Northern District of Illinois held that states can adopt programs that influence which generators enter and/or continue operating in wholesale markets.¹⁵ According to the court, while such programs may “affect wholesale electricity rates, those rates were not [the] target of state regulation.”¹⁶ Thus, in establishing the programs, states do not infringe upon FERC’s regulatory authority.¹⁷

¹⁰ *Id.* at 15.

¹¹ *See generally*, *Allco Fin. Ltd. v. Klee*, 861 F.3d 82, 93 (2d Cir. 2017).

¹² *See e.g.*, *WSPP Inc.*, 139 FERC ¶ 61,061 (concluding that “RECs are state-created and state-issued instruments certifying that electric energy was generated pursuant to certain requirements and standards. Thus, a REC does not constitute the transmission of electric energy in interstate commerce or the sale of electric energy at wholesale in interstate commerce. Therefore, RECs and contracts for the sale of RECs are not themselves jurisdictional facilities subject to the Commission’s jurisdiction under FPA section 201”). *See also* Zibelman, 2018 U.S. App. LEXIS at 32 (noting that “FERC itself has sanctioned state programs that increase capacity or affect wholesale market prices, so long as states regulate matters within their jurisdiction . . . [For example,] States may require retirement of existing generators or construction of environmentally-friendly units, or . . . take any other action in their role as regulators of generation, even though it may affect[] the market clearing price” (internal quotations omitted)).

¹³ FERC PJM Order, *supra* note 1, at 1.

¹⁴ *Hughes*, 136 S. Ct. at 1298. *See also Id.* at 1300 (Sotomayor, J., concurring) (noting that the FPA “envisions a federal-state relationship marked by interdependence”).

¹⁵ *Vill. of Old Mill Creek*, 2017 U.S. Dist. LEXIS at 32. The same reasoning has also been applied in other cases. *See e.g.*, *Allco*, 861 F.3d at 101 (2d Cir. 2017) (holding that a state policy that increases the supply of electricity and thus places downward pressure on prices “does not . . . amount to a regulation of the interstate wholesale electricity market that infringes on FERC’s jurisdiction” because it has only an “incidental effect on wholesale prices”); Zibelman, 2018 U.S. App. LEXIS at 34 (finding that a state policy that “incidental[ly] effect[s]” wholesale electricity markets “by increasing revenues for qualifying [generators], which in turn increases the supply of electricity, which in turn lowers auction clearing prices, . . . does not cause clear damage to federal goals”); *Star*, 2018 U.S. App. LEXIS at 15 (concluding that “because states retain authority over power generation, a state policy that affects [wholesale market] prices only by increasing the quantity of power available for sale is not preempted by federal law”).

¹⁶ *Id.*

¹⁷ *Id.*

As the state clean energy policies at issue were validly adopted and do not encroach upon areas under federal jurisdiction, FERC must ensure that its regulation of wholesale electricity markets does not interfere with the policies' operation. Rather, as discussed in section II below, FERC must exercise its regulatory authority in a manner that accommodates and facilitates operation of the state policies.

II. In Regulating Wholesale Electricity Markets, FERC Must Facilitate the Operation of Valid State Policies

As the foregoing discussion makes clear, the FPA establishes a cooperative federalism approach to energy regulation, under which both FERC and the states have a role to play. FERC's role is limited to regulating the interstate transmission and wholesale sale of electricity.¹⁸ While FERC may exercise its authority over wholesale sales to regulate the operation of markets,¹⁹ in doing so, it must not impede the operation of clean energy policies validly adopted by the states. If it does, FERC will interfere with the exercise of states' regulatory authority over electricity generation, thus encroaching upon an area within the exclusive jurisdiction of the states, and thereby exceed its own statutory authority.²⁰

In exercising its authority over wholesale electricity sales, FERC may, of course, regulate the operation of wholesale markets to ensure they produce just and reasonable prices. As FERC has itself recognized, market regulation should "balance [the Commission's] responsibility to promote economically-efficient prices, while accommodating states' ability to pursue legitimate policy objectives."²¹ This is not just good policy, but a legal requirement. Indeed, in *Coalition for Competitive Electricity v. Zibelman*, the U.S. District Court for the Southern District of New York declared that "when the State is legitimately regulating a matter of state concern, FERC's exercise of its authority must accommodate that state regulation unless clear damage to federal goals would result" (internal quotations omitted).²² FERC asserts that state clean energy policies cause such damage, interfering with the "integrity" and "effectiveness" of wholesale markets, and thus rendering market prices "unjust and unreasonable." There is, however, little evidence to support that view.

¹⁸ Federal Power Act, § 201(b)(1); 16 U.S.C. § 824(b)(1).

¹⁹ Hughes, 136 S. Ct. at 1294 (holding that FERC may "extensively regulate[] the structure of the PJM capacity auction to ensure that it efficiently balances supply and demand, producing a just and reasonable clearing price").

²⁰ Elec. Power Supply Ass'n, 136 S. Ct. at 775 & footnote 7 (2016) (indicating that FERC will exceed its authority where it takes over "a job [assigned to] the State's alone" or "trespass[es] on the states' authority" to regulate matters reserved to them under the FPA). See also Elec. Power Supply Ass'n v. FERC, 753 F.3d 216, 221-222 (D.C. Cir. 2014) (noting that FERC's "reach extends only to those matters which are not subject to regulation by the states . . . Absent a clear and specific grant of jurisdiction elsewhere, [FERC] cannot regulate areas left to the states").

²¹ ISO New England, 158 FERC ¶ 61,138 at 43 (Feb. 3, 2017).

²² Zibelman, 272 F. Supp. 3d at 576, aff'd, 2018 U.S. App. LEXIS 27605 (2nd Cir. 2018). While this case was concerned with federal preemption of state policies which is not at issue here, the court's reasoning is nonetheless instructive, providing useful guidance for determining the scope of FERC's authority.

Contrary to FERC’s claim, there is nothing to suggest that state policies have impaired the operation of PJM’s capacity market by suppressing prices.²³ As FERC itself recognizes, price suppression could lead to supply shortages, but there is currently excess capacity in the PJM region.²⁴ This suggests that, rather than being artificially low, capacity market prices have actually been fairly high.²⁵ Indeed, as PJM itself recognized just two years ago, there are an “abundance of merchant projects coming online . . . indicat[ing] that the market is providing adequate returns to attract capital.”²⁶ No downward trend in capacity market prices is evident over time.²⁷ On the contrary, prices have consistently fluctuated since the capacity market was established.²⁸ There is no evidence to suggest that the fluctuations are due to state policies or that those policies will lead to a decline in market prices in the future.²⁹ In fact, research suggests that state policies are likely to have little impact on prices, which will continue to adjust in response to market forces.³⁰

FERC’s claim that state policies, particularly REC and ZEC programs, impair capacity market efficiency is also without support.³¹ Contrary to FERC’s claims, the programs actually enhance market efficiency by helping to internalize the cost of externalities, such as greenhouse gas emissions.³² Absent the programs, the cost of emissions would not be reflected in wholesale electricity markets, giving high-emitting generators an unfair competitive advantage over low-emitters.³³ This skewing of the competitive landscape will, over time, impair the ability of wholesale markets to deliver reliable electricity supplies at just and reasonable rates. Achieving that goal requires effective competition, such that markets result in proper price formation, and thus appropriately incentivize new investment. As Commissioner LaFleur has previously noted, prices should “reflect the true cost of reliable operations,” otherwise they will not send “the

²³ FERC PJM Order, *supra* note 1, at 1 (arguing that the state programs “have a suppressive effect on the price of capacity”).

²⁴ *Id.* at 26.

²⁵ FERC PJM Order, *supra* note 1, at 95 (Glick, Comm’r, dissenting) (arguing that “[i]f anything, PJM’s problem is that today’s prices are so high that the region continues to attract new “competitive” generation resources at a time when the region already has too much capacity”).

²⁶ PJM INTERCONNECTION, RESOURCE INVESTMENT IN COMPETITIVE MARKETS 29 (2016), <https://perma.cc/6FRB-9CKT>.

²⁷ In actual fact, in the most recent capacity market auction, prices increased from \$76.53 per megawatt-day to \$140 per megawatt-day for most of the PJM footprint. *See* PJM, *Capacity Auction Attracts Diverse, Competitive Resources*, PJM INSIDE LINES, <https://perma.cc/CVG4-UK3G> (May 23, 2018).

²⁸ SYLWIA BIALEK & BURCIN UNEL, CAPACITY MARKETS AND EXTERNALITIES: AVOIDING UNNECESSARY AND PROBLEMATIC REFORMS 15-16 (2018), <https://perma.cc/X7UX-6ZSU>.

²⁹ *Id.* at 14-16.

³⁰ *Id.*

³¹ FERC PJM Order, *supra* note 1, at 1 (claiming that “the integrity and effectiveness of [PJM’s] capacity market . . . have become untenably threatened” by the state programs).

³² Bialek & Unel, *supra* note 28, at 2 & 6-8.

³³ *See generally, id.* at 6-7 & 10-11; STEVEN WEISSMAN & ROMANY WEBB, ADDRESSING CLIMATE CHANGE WITHOUT LEGISLATION: VOLUME 2 10 (2014), <https://perma.cc/3H4Q-N3MU>; Justin Gundlach & Romany Webb, *Carbon Pricing in New York ISO Markets: Federal and State Issues*, 35 PACE ENVTL. L. REV. 1, 58-60 (2017).

investment signal for which we are relying on the market.”³⁴ It is particularly important that prices reflect the cost of greenhouse gas emissions and associated climate change because the effects thereof – e.g., rising temperatures, less reliable access to water, and more frequent and intense storms³⁵ – will impact electric system reliability.³⁶ State REC and ZEC programs help to factor in those costs and thereby improve the functioning of wholesale markets.

Given the above, there is no valid basis for concluding that REC, ZEC, and other clean energy policies interfere with wholesale market operation, and thus frustrate federal regulatory goals. FERC’s assertions to the contrary are especially puzzling given that it does not appear to have any concerns about the market impact of programs supporting fossil fuel development. The U.S. fossil fuel industry is estimated to receive over \$27 billion in subsidies each year.³⁷ Those subsidies artificially reduce fossil fuel prices which, in turn, lowers the costs faced by fossil fuel generators and enables them to submit lower bids into the wholesale market.³⁸ This, more than any state clean energy policy, is likely to interfere with operation of the wholesale market and suppress prices.³⁹ Nevertheless, FERC appears unconcerned about the fossil fuel subsidies, leaving them unaddressed in its order and instead focusing on clean energy policies that have little impact.

III. FERC’s Proposed Tariff Revisions Have the Potential to Impede State Regulation of Electricity Generation

Despite the lack of evidence that state policies interfere with capacity market operation, FERC has nonetheless proposed:

- (1) expanding the minimum offer price rule (“MOPR”) to all state-supported generating resources with few to no exceptions; and

³⁴ Transcript of Hearing: Price Formation in Energy and Auxiliary Services Markets Operated by Regional Transmission Organizations and Independent System Operators 6 (Dec. 9, 2014), <http://perma.cc/YAM8-L6FE>.

³⁵ These and other effects of climate change have been documented in numerous government reports, including the National Climate Assessment, and other materials published by the U.S. Global Change Research Office and the National Academies of Sciences. Congress recently affirmed that these reports are “reliable” sources of climate change information. See John S. McCain National Defense Authorization Act for Fiscal Year 2019 § 2805(c) (2018).

³⁶ See generally, JUSTIN GUNDLACH & ROMANY WEBB, CLIMATE CHANGE IMPACTS ON THE BULK POWER SYSTEM: ASSESSING VULNERABILITIES AND PLANNING FOR RESILIENCE (2018), <https://perma.cc/G9H8-Y2FW>. It should be noted that, adapting the electricity system to deal with climate change impacts will give rise to significant costs, potentially leading to higher electricity prices over time. See U.S. DEPARTMENT OF ENERGY, CLIMATE CHANGE AND THE ELECTRICITY SECTOR: GUIDE FOR CLIMATE CHANGE RESILIENCE PLANNING 42-47 (2016), <https://perma.cc/2L7L-N669>.

³⁷ SHELAGH WHITLEY ET AL., G7 FOSSIL FUEL SUBSIDY SCORECARD: TRACKING THE PHASE-OUT OF FISCAL SUPPORT AND PUBLIC FINANCE FOR OIL, GAS, AND COAL 16 (2018), <https://perma.cc/TY6F-AT8S>.

³⁸ FERC PJM Order, *supra* note 1, at 93 (Glick, Comm’r, dissenting).

³⁹ *Id.*

- (2) allowing state-supported resources to choose to be removed from the capacity market (along with a commensurate amount of load) for a specified time period.⁴⁰

These changes have the potential to frustrate state efforts to shape the electricity generating mix and encourage the entry and/or continued operation of generators with preferred environmental attributes. States' preferred generators may, as a result of the changes, be prevented from selling capacity through PJM's wholesale market.⁴¹ Where this occurs, the relevant state will likely have to cover the resources' capacity costs, as well as paying for their environmental attributes (e.g., through ZEC programs).⁴² This will substantially increase – potentially by hundreds of millions of dollars – the cost to states of implementing their clean energy policies.⁴³ At the same time, states may find it increasingly difficult to achieve their policy goals, including because the proposed changes will lead to higher capacity market prices, helping to “prop-up” non-preferred resources that remain in the market.⁴⁴ Those resources would benefit despite the fact that they are already supported by federal government subsidies and other policies that cause the exact type of market interference FERC is purportedly trying to address.⁴⁵

Unless FERC implements its proposed changes in a manner that avoids the above impacts, states may be forced to abandon their validly adopted clean energy policies.⁴⁶ This will hamper the transition to a clean generating mix, leading to negative environmental and economic outcomes. From an environmental perspective, expanding clean generation is vital to reduce the electricity sector's greenhouse gas emissions, and thus mitigate climate change.⁴⁷ It also has significant economic benefits, with research indicating that the clean energy sector is a key driver of job growth, creating more jobs per unit of electricity generated than the fossil fuel-based sector.⁴⁸ Especially large growth has recently been experienced in the U.S. solar industry, which added jobs seventeen times faster than the general economy in 2016.⁴⁹ That is, however, unlikely to continue if state policies change. Analysis by the International Renewable Energy Agency

⁴⁰ FERC PJM Order, *supra* note 1, at 6.

⁴¹ *Id.* at 88 (Glick, Comm'r, dissenting) (noting that “the Commission’s proposal would effectively force state-sponsored resources out of the capacity market”).

⁴² *Id.* (arguing that the states will be left to “pick up the tab”).

⁴³ See generally Danny Cullenward & Shelly Welton, *The Quiet Undoing: How Regional Electricity Market Reforms Threaten State Clean Energy Goals*, YALE J. REG. BULLETIN 19 (forthcoming Sept. 2018).

⁴⁴ FERC PJM Order, *supra* note 1, at 88 (Glick, Comm'r, dissenting). See also ISO New England Inc., Order on Tariff Filing, 162 FERC ¶ 61,205 at 65 (Glick, Comm'r, dissenting) (Mar. 9, 2018).

⁴⁵ See *supra* part II.

⁴⁶ Cullenward & Welton, *supra* note 43, at 19.

⁴⁷ See generally, JAMES H. WILLIAMS ET AL., PATHWAYS TO DEEP DECARBONIZATION IN THE UNITED STATES (2015), <https://perma.cc/DHH8-5DBE> (identifying electricity system and other changes required to achieve global climate change goals).

⁴⁸ See e.g., Max Wei et al., *Putting Renewables and Energy Efficient to Work: How Many Jobs Can the Clean Energy Industry Generate in the U.S.*, 38 ENERGY POLICY 919, 928.

⁴⁹ INTERNATIONAL RENEWABLE ENERGY AGENCY, RENEWABLE ENERGY AND JOBS: ANNUAL REVIEW 2017 14 (2017), <https://perma.cc/PW43-7TMU>.

indicates that past growth has been driven, in large part, by government policies supporting the clean energy industry.⁵⁰ Recent policy changes have contributed to job losses in the industry and more are likely if states are forced to abandon efforts to support clean energy.⁵¹

IV. Conclusion

For the reasons set out above, FERC must ensure that its regulation of PJM's wholesale capacity market accommodates valid state clean energy policies, adopted in accordance with the FPA. FERC must be particularly careful to ensure that its regulation does not frustrate the operation of state policies or effectively force states to abandon their clean energy goals. If it does, FERC would not only be interfering with the states' exercise of their exclusive authority under the FPA, but also their achievement of important environmental and economic goals.

Sincerely,



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⁵⁰ See e.g., *id* at 14.

⁵¹ See generally, INTERNATIONAL RENEWABLE ENERGY AGENCY, RENEWABLE ENERGY AND JOBS: ANNUAL REVIEW 2018 16 (2018), <https://perma.cc/W8F9-ZRYA>.