Illuminating the Energy Policy Agenda: Electricity Sector Issues Facing the Next Administration

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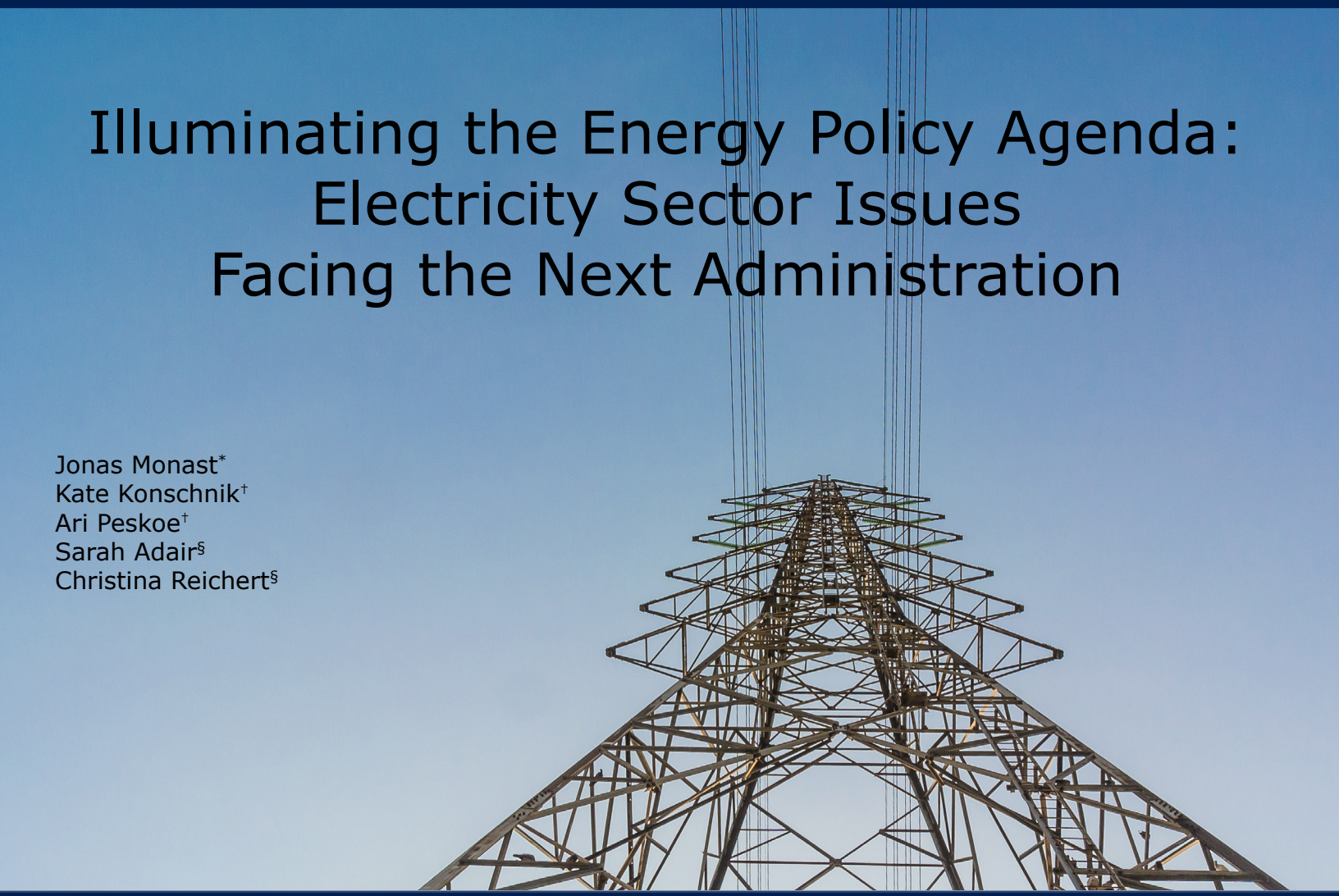

Part 1: Federal Regulation of Electricity Markets

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Review
The work reported in this publication benefited from review from experts in the field. The preliminary analysis was shared with external parties, and this publication reflects their feedback. However, this publication has not undergone a formal review process due to the timely nature of its contents.

SUMMARY

The next president will take office during a period of rapid market and regulatory change for the U.S. electricity sector. Due to statutory deadlines, pending lawsuits, and agency rulemakings—if not by choice—the next president will tackle energy policy. To prepare policy makers for what promises to be a dynamic period in electricity law and policy, this report provides an overview of six key areas of federal policy and, for each area, identifies the decision points—in time or circumstances—that will force the next administration to make choices that shape the future of the grid. For each decision point, the report explores the next president's options and the federal agencies and authorities that he or she could deploy.

Part 1 of this report outlines the shifting line between federal and state jurisdiction over the sector. Regionalization of the electric grid and development of interstate markets for electricity, electric capacity, and transmission development have expanded the responsibilities of the Federal Regulatory Energy Commission (FERC), but states retain jurisdiction over generation facilities and retail markets. Ongoing tensions between state and federal policies relate to the generation mix, resource adequacy, compensation for distributed energy resources, implementation of the Public Utilities Regulatory Policies Act of 1978, and competition policy. Responses by federal officials, including FERC commissioners that the next president will appoint, will determine how to address disputes, the resolution of which could have broad impacts on the industry.

FEDERAL REGULATION OF ELECTRICITY MARKETS

At a Glance

Federal Actors: Federal Energy Regulatory Commission (FERC).

Appointments: In January 2017, the five-member FERC will have two vacancies.

Legal Authorities: Federal Power Act (FPA) and Public Utilities Regulatory Policies Act of 1978 (PURPA).

Decision Points:

- Whether to incorporate state policies regarding the generation mix—e.g., renewable energy policies—into federally regulated markets, to move to preempt these state policies, or to maintain the status quo.
- How to clarify the jurisdictional line between state authority over distributed energy resources, such as rooftop solar, and FERC authority over wholesale energy sales.
- Whether to update PURPA rules in light of the increasing competitiveness of renewable resources.
- Whether to update competition policy—including FERC oversight of utility mergers and Federal Trade Commission and Department of Justice anti-trust policy—in light of increased industry consolidation and proliferation of distributed energy resources.

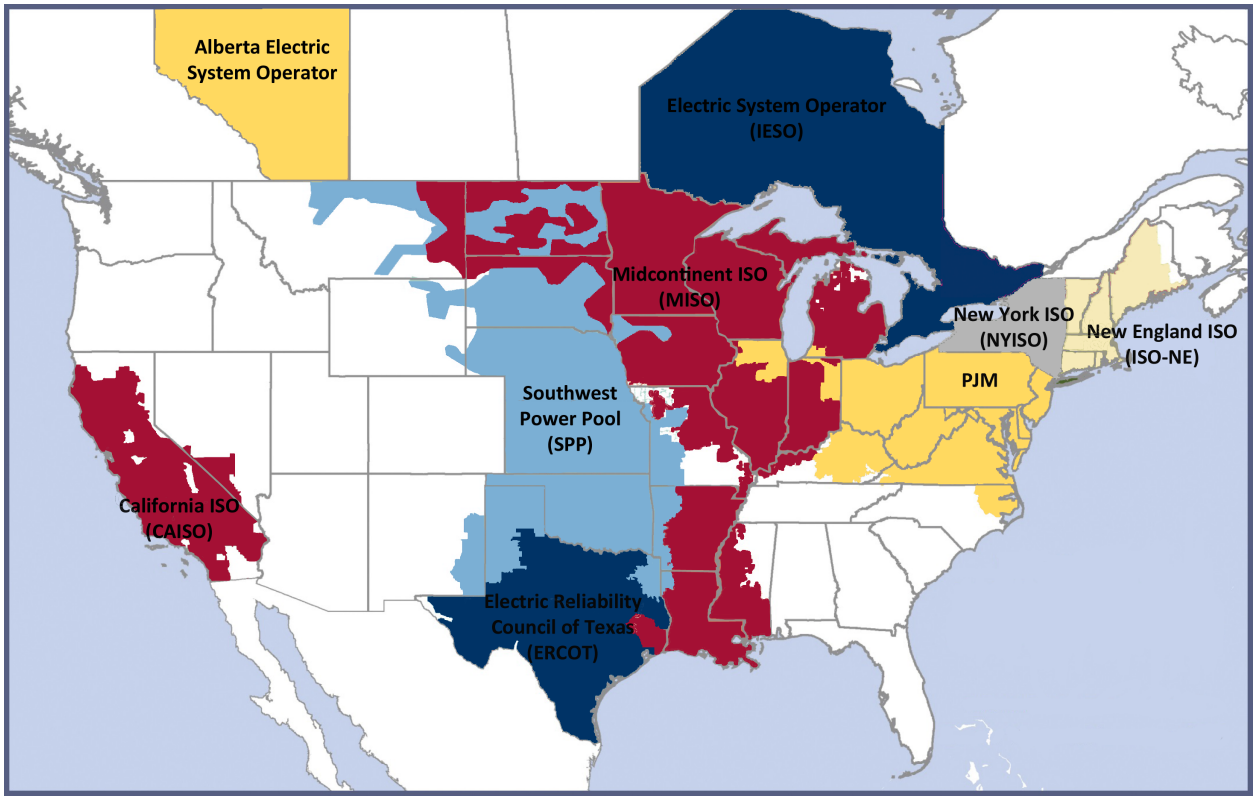
The line between federal and state jurisdiction over the electricity sector is shifting. FERC once played a limited role in sector oversight, but regionalization of the electric grid and development of interstate markets for electricity, electric capacity, and transmission development have expanded its responsibilities. At the same time, states have retained jurisdiction over generation facilities and retail markets. They have used this authority to implement policies, such as mandates for renewable energy and tariffs for rooftop solar, that may affect the federally regulated planning processes and markets. Whether and how FERC accommodates states' policy goals, and the extent to which states can regulate the industry without intruding into federal regulatory space, are questions that FERC has traditionally addressed on a case-by-case basis.

Despite three Supreme Court decisions in the past two years regarding state and federal jurisdiction over energy regulation, tensions between state and federal policies are likely to continue.
Ongoing disputes relate to the generation mix, resource adequacy, compensation for distributed energy resources, implementation of the Public Utilities Regulatory Policies Act of 1978 (PURPA), and competition policy. Although disputes involving the generation mix and resource adequacy are most pertinent to states with restructured electricity markets, other issues—including compensation for distributed resources, PURPA implementation, and competition policy—have broad implications regardless of a state's system of utility regulation. Responses by federal officials, including FERC Commissioners that the next president will appoint, will determine how to address these disputes, the resolution of which could have broad impacts on the industry.

Background

Historically, state public utility regulators oversaw local or regional monopolies that generated power and served all ratepayers in their assigned territories. The Federal Power Act (FPA) reserved traditional state authority over power plants and sales to consumers and granted FERC jurisdiction over what were then limited wholesale electricity transactions.[1] However, reforms initiated by Congress in the Energy Policy Act of 1992 (EPAct) and furthered by a series of FERC orders in the 1990s expanded the scope of federal regulation in some regions.[2] Today, regional transmission organizations (RTOs) run auction markets that determine which power plants generate energy, operate the high-voltage grid, and engage in long-term transmission planning.[3] FERC regulates these entities under the FPA. Outside of the RTO service territories (see white areas in Figure 1), the traditional system of state-dominated utility regulation prevails, and investor-owned utilities (IOUs), government-owned utilities, or electric cooperatives perform these functions.

Figure 1. RTO territories



Source: Federal Energy Regulatory Commission, *Energy Primer: A Handbook of Energy Market Basics* (2015), http://www.ferc.gov/market-oversight/guide/energy-primer.pdf.
Note: ERCOT is regulated by the state of Texas, not FERC.

IOUs distribute power to approximately 70% of U.S. residents.[4] In most states, including many states covered by RTOs, IOUs are vertically integrated and earn returns on their capital expenditures (including electricity generation and transmission infrastructure investments) through state-regulated retail rates paid by consumers. IOUs in 14 "restructured" states (all covered by RTOs) own only transmission and distribution infrastructure; they transferred ownership of power plants to corporate affiliates or third

parties. In these states, generation owners do not collect retail rates from consumers. Therefore, they make investment decisions on the basis of market prices rather than regulated rates of return.
FERC regulation expanded in states with restructured electricity markets, encompassing industry activities that states once regulated exclusively. Federal courts must now decide jurisdictional disputes.[5] The disputes typically focus on whether a state policy (1) intrudes into FERC's exclusive regulatory space or (2) conflicts with the operation of federally regulated RTO markets. Although the precise issues differ in each case, the fundamental question is how to divide up regulatory roles.

The Supreme Court decided an unprecedented number of FERC cases during the 2014–2015 and 2015–2016 terms:

- *OneOK v. Learjet* (2015): The court held that FERC's regulation of interstate sales of natural gas under the Natural Gas Act does not preempt claims against sellers under state antitrust law and stated that a clear dividing line between state and federal authority in energy regulation is a "Platonic ideal."[6]
- *FERC v. Electric Power Supply Association (EPSA)* (2016): The court held that FERC may regulate the price that RTOs pay to providers of demand response who reduce consumption when the price of energy is high, and it noted that federal and state regulation are "complementary."[7]
- *Hughes v. Talen Energy* (2016): The court held that a Maryland order requiring distribution utilities to sign contracts with a natural gas generator with prices tied to RTO auctions was preempted by the FPA because the state had "invade[d] FERC's regulatory turf." The court emphasized that its decision was limited to the contracts at issue, which effectively changed the price of a FERC-regulated wholesale sale; meanwhile, Justice Sonia Sotomayor's concurring opinion noted that the FPA is a "collaborative federalism statute."[8]

In each case, the court's opinion or a concurring opinion observed that responsibility for energy regulation is shared by federal and state regulators. However, the court's decisions do not resolve questions regarding limits of those authorities, leaving regulators, courts, and legislators to continue to navigate jurisdictional uncertainty.[9]

Congress has noted these tensions and could opt to amend the 80-year old jurisdictional language in the FPA. In June 2016, the House Committee on Energy and Commerce sent a letter to FERC commissioners asking "how [ ] new technologies, programs, incentives, and policy changes at the state and federal levels affect the jurisdictional [ ] line" between FERC and state authority and whether the jurisdictional split in the FPA drawn by Congress in 1935 "continue[s] to be well-suited for today's electricity sector."[10] If Congress amends the FPA's core language, the new FERC commissioners will set important precedent in applying it. However, given that Congress has never amended the statute's jurisdictional language, FERC will likely continue to operate under the existing legal framework.

Decision Points

FERC Appointments

The next president will have an immediate opportunity to nominate two commissioners to the five-member FERC. The FPA stipulates that no more than three commissioners "shall be appointed from the same political party."[11] All three current FERC commissioners are registered Democrats, thus appointees to both open seats must be affiliated with another party or independents, regardless of the party of the president.

Through their decisions on specific matters before FERC, these new commissioners may shape how federal regulation interacts with state policies. FERC often reacts to developments in the industry by approving or disapproving proposed rule changes submitted by RTOs, responding to complaints about RTO market rules and petitions requesting declaratory relief, and weighing in on lawsuits filed in federal and state courts by market participants or industry stakeholders. FERC may also initiate its own reforms if it concludes that they are needed to maintain just, reasonable, and not unduly discriminatory rates.[12] An example of a FERC-initiated reform is Order No. 745, which set compensation levels for demand-response resources in RTO markets and which was upheld by the Supreme Court this year.[13]

Generation Mix

States have used their authority over generation facilities to require utilities to procure renewable energy, meet energy efficiency and demand response targets, and undertake long-term resource planning. States have also set rates for distributed resources (e.g., rooftop solar), mandated that utilities procure energy storage, considered proposals for supporting existing resources (e.g., nuclear and coal-fired power plants at risk of retirement), and initiated pilot projects to test new technologies. These policies and initiatives make states "the test beds for the evolution of the grid of the future."[14] And they are having major impacts on the nation's electric grids; for example, the Lawrence Berkeley National Lab found that nearly 60% of renewable energy growth since 2000 was built to meet a state's renewable energy mandate.[15]

As noted above, FERC may be called on to respond to these policies in three ways. First, an RTO might propose changes to its market rules. For example, in 2014 PJM submitted new capacity market rules that it stated were designed to ensure that generators produce energy when needed during emergency conditions. In comments filed at FERC, opponents argued that the proposed rules erect barriers for demand-response resources and do not account for the full value of renewable resources.[16] Meanwhile, the nuclear industry supported the rule changes, concluding that their plants would benefit from payments for performance. Over Chairman Bay's dissent, the commission approved the new rules, but a legal challenge is pending in the D.C. Circuit.[17]

As of October 2016, participants in the New England market are engaged in a stakeholder process for incorporating state renewable energy and environmental policy requirements into the wholesale market rules. Proposals include a carbon price in the energy market, a forward market for clean energy, and a zero-emissions capacity procurement mechanism. If stakeholders finalize a proposal, they or the ISO will file tariff amendments with FERC. The commission will then have to determine whether the proposal is "just and reasonable" and address any legal objections to including renewable energy requirements or accounting for carbon emissions in a FERC-jurisdictional market.

A party might petition FERC to require changes to RTO market rules. For example, in June 2016, in response to state policies that facilitate expansion of natural gas pipelines, several generators filed a complaint requesting that FERC institute changes to ISO New England market rules to mitigate these allegedly discriminatory policies.[18] The commission subsequently dismissed the complaint, concluding that state policies were in flux following a court decision and that the allegations were therefore speculative.

Similarly, a party might petition for a declaratory order that a particular state policy violates federal law. FERC often accommodates state policy choices, by choosing not to act on complaints.[19] But the complaints are likely to continue, particularly as state mandates, pilot projects, and incentives expand. While FERC could steer complainants to federal courts, the commission may be better positioned to resolve jurisdictional disputes in ways that are consistent with the goals and operations of the RTO markets. In August 2016, two cooperative utilities in Maryland asked FERC to find that the state's new community solar program is preempted by the FPA and PURPA.[20] Details of community solar programs vary by state; 15 states have taken legislative or regulatory action to enable such programs.[21] A FERC ruling against Maryland could have implications for how solar is deployed in other states.

Third, FERC often participates in federal litigation to which it is not a party. In 2014, the Third Circuit invited FERC to weigh in on a New Jersey incentive that facilitated construction of new natural-gas-fired generators. FERC argued that the state's policy is preempted, and this year it filed similar arguments at the Supreme Court about a nearly identical Maryland program. Both courts sided with FERC, holding that the states' policies are preempted.

FERC can also act on its own and order rule modifications to meet new circumstances. One example is Order 764, facilitating integration of renewable resources.[22] FERC has consistently remained neutral on technologies and fuels used to generate electricity. It has not required RTO market rules that benefit specific technologies, but it has acted to ensure that those rules do not "unduly discriminate" against certain technologies.[23]

Across these scenarios, FERC's key decision will be to determine whether it should actively accommodate state policy preferences, move to preempt state policies that are inconsistent with interstate markets, or remain silent on a potential conflict between state policy and federal policy. There may be no one-size-fits-all approach to addressing the tensions between state regulation and federal regulation, and FERC may continue to make case-by-case determinations.

Resource Adequacy

In addition to supporting specific types of energy resources, state policies also seek to ensure that sufficient generation capacity exists to meet consumer demand. However, in states that have opted to restructure their electricity markets, state-regulated utilities no longer construct new generation facilities and must therefore procure sufficient capacity to meet demand through federally regulated wholesale purchases. Although resource adequacy was once under the exclusive purview of state regulators, it is now largely addressed at the wholesale level. State efforts to encourage construction of new generation are therefore aimed at federally regulated wholesale markets and may run afoul of the FPA. For example, as noted above, the Supreme Court held in *Hughes v. Talen Energy* that FERC's regulation of interstate capacity markets preempted a Maryland incentive that supported the development of a new power plant.[24]

As it oversees capacity market rules and resolves complaints in a post-*Hughes* world, FERC can choose to clarify how state policies regarding generation procurement can exist alongside federally regulated markets, or it may conclude that such policies are preempted by its regulation of interstate markets.

Compensation for Distributed Energy Resources

Under the FPA, FERC has jurisdiction over sales of electric energy for resale in interstate commerce. Nearly every state requires utilities to offer a net metering tariff that establishes a rate for sales from distributed energy resources (DERs), such as rooftop solar installations, to the utility. Practitioners and scholars have debated whether these sales fall under FERC's jurisdiction.[25] FERC has consistently declined to assert jurisdiction to preempt state net metering policies. As distributed energy resources, including energy storage, continue to gain market share, and states reevaluate their net metering regimes, a utility or other market participant may ask FERC to regulate sales from DERs. In addition, RTOs may bring their own proposals for DERs to FERC for approval. For instance, FERC recently approved a California ISO market program that allows aggregators of DERs to sell energy and grid services.[26] Relatedly, New York is in the midst of a major reform effort that tasks utilities with the operation and facilitation of distribution-level markets.[27] Other states and RTOs may pursue measures similar to those under way in California and New York. Depending on how the states implement these markets, they could implicate FERC's jurisdiction over wholesale transactions and could create multiple decision points regarding compensation for distributed energy resources.

PURPA Implementation

Passed by Congress in 1978, PURPA requires utilities to purchase power from certain renewable energy and cogeneration facilities, and it tasks states with setting rates for those sales. At the time, the utility system did not have competition, and Congress intended the law to spur innovation in electricity generation. In 2005, Congress relaxed the purchase obligations for utilities that participate in RTO markets.[28] In light of growth in renewable energy and creation of RTO markets, FERC recently convened a technical conference to discuss PURPA implementation.[29] Meanwhile, several recent lawsuits in federal courts argue that state implementation of PURPA is contrary to the law.[30] Congress tasked FERC with administering the statute, and the Commission may choose to update its rules in light of industry changes during the next administration. FERC also regularly adjudicates complaints against states and utilities about PURPA implementation, and it could articulate new policies through its decision in these cases.

Competition Policy

In 2012, Duke Energy merged with Progress Energy, creating the largest electric utility in the country.[31] Just four years later, Exelon reached settlement agreements in multiple states and the District of Columbia to finalize its merger with Pepco. The mergers epitomize an industry trend since 2005, when Congress repealed the Public Utility Company Holding Act, which rescinded the Securities and Exchange Commission's (SEC) jurisdiction over multi-state utilities.

The FPA requires FERC to determine whether proposed mergers of public utilities are "consistent with the public interest."[32] FERC considers whether a proposed transaction would result in one tranche of ratepayers subsidizing others, and it explores the effects of proposed mergers on competition, rates, and regulation.[33] FERC approved the Exelon-Pepco transaction, under a long-standing merger policy that it reaffirmed in 2012. The American Antitrust Institute had unsuccessfully urged the U.S. Department of Justice (DOJ) to stop the merger. AAI argued that FERC's review was inadequate and highlighted the

limitations of settlements approved by state regulators.[34] Some analysts believe that industry consolidation is likely to continue, which could renew focus on the commission's merger policies. In September 2016, FERC released a Notice of Inquiry seeking comment on its analysis of merger applications.[35]

Stakeholders may also raise anti-competitiveness concerns over utility policies concerning DERs. In June 2016, the Federal Trade Commission (FTC) held a workshop on competition and consumer protection issues related to rooftop solar, highlighting its interest in competition between utilities and rooftop solar providers. Opponents of federal action in this area argue that state oversight of utilities is sufficient to mitigate competitive concerns. However, DERs may ultimately compete with wholesale generation, and such interstate competition is beyond a state's jurisdiction. Antitrust falls under DOJ and FTC jurisdiction, not FERC jurisdiction, and these agencies could be influential in these cases. For example, in a recently filed brief, DOJ urged the Ninth Circuit Court of Appeals to reject a utility's defense to its allegedly anti-competitive rates for rooftop solar.[36]

ENDNOTES

[1] 16 U.S.C. §§ 791a *et seq.* (1920).
[2] *See* Energy Policy Act of 1992, Pub. L. No. 102-486, § 711, 106 Stat. 2776, 2909; FERC, Order 888: Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, 78 FERC ¶ 61,220 (1997); *New York v. FERC*, 535 U.S. 1 (2002).
[3] *See* FED. ENERGY REG. COMM'N, ENERGY PRIMER: A HANDBOOK OF ENERGY MARKET BASICS (2015), http://www.ferc.gov/market-oversight/guide/energy-primer.pdf.
[4] Statistic derived from U.S. EIA, Form 861 (2014), Spreadsheet labeled "Sales_Ult_Cust_2014."
[5] See http://www.statepowerproject.org for summaries of recent and ongoing litigation in federal courts. ST. POWER PROJECT, https://statepowerproject.org/ (last visited Sept. 12, 2016).
[6] 135 S. Ct. 1591 (2015).
[7] 136 S. Ct. 760 (2016).
[8] 136 S. Ct. 1288 (2016).
[9] *See, e.g.*, Order, *Entergy Nuclear Fitzpatrick v. Zibelman*, no. vc-00230 (N.D.N.Y. Apr. 20, 2016) (directing parties to file briefs about the implications of the Supreme Court's ruling in Hughes v. Talen); Jim Rossi, *The Brave New Path of Energy Federalism*, 95 TEX. L. REV. (forthcoming 2016).
[10] Letter from Rep. Fred Upton and Rep. Ed Whitfield to FERC Chairman Norman Bay, June 10, 2016.
[11] 16 U.S.C. § 792 (2012).
[12] 16 U.S.C. § 824e.
[13] FERC, Order 745, 134 FERC ¶ 61,187 (2011) (upheld in *FERC v. Electric Power Supply Ass'n.*, 136 S.Ct. 760 (2016)).
[14] QUADRENNIAL ENERGY REVIEW: ENERGY TRANSMISSION, STORAGE, AND DISTRIBUTION INFRASTRUCTURE S-15 (2015), http://energy.gov/sites/prod/files/2015/07/f24/QER%20Full%20Report_TS%26D%20April%202015_0.pdf.
[15] GLEN BARBOSE, ET AL, U.S. RENEWABLE PORTFOLIO STANDARDS: 2016 ANNUAL STATUS REPORT (2016), https://emp.lbl.gov/sites/all/files/lbnl-1005057.pdf.
[16] FERC, Order on Proposed Tariff Revisions, PJM Interconnection LLC, 151 FERC ¶ 61,208 at PP 61–62 (2015).
[17] Advanced Energy Mgmt. All., et al. v. FERC, D.C. Cir. Case No. 16-1234.
[18] FERC, Order Dismissing Complaint, 156 FERC ¶ 61,150 (2016).
[19] *See, e.g.*, FERC, Order Denying Request for Declaratory Order, 94 FERC ¶ 61,340 (2001) (denying a utility's request for a determination that Iowa's net metering rules are preempted by federal law); FERC, Notice of Intent Not to Act, 148 FERC ¶ 61,233 (2014) (declining to act on a complaint about Massachusetts' rates for renewable energy under PURPA).
[20] Pet. Declaratory Order of Southern Maryland Electric Cooperative, Inc. and Choptank Electric Cooperative, Inc., FERC Docket No. EL16-107 (Aug. 23, 2016).
[21] TOM STANTON & KATHRYN KLINE, NRRI, THE ECOLOGY OF COMMUNITY SOLAR GARDENING: A 'COMPANION PLANTING' GUIDE (2016), http://nrri.org/download/nrri-16-7-community-solar.
[22] *See, e.g.*, FERC, Order 764: Integration of Variable Energy Resources, 139 FERC ¶ 61,246 (2012), http://www.ferc.gov/whats-new/comm-meet/2012/062112/E-3.pdf.
[23] *See* FERC, Order 764: Integration of Variable Energy Resources, 139 FERC ¶ 61,246 (2012), FERC, Order. 792: Small Generator Interconnection Agreements and Procedures, 145 FERC ¶ 61,159 (2013).
[24] RTO-run capacity markets are designed to ensure enough generation is available to reliably meet peak power demands. Traditionally, utilities satisfied their obligations to maintain adequate generation with owned generation or bilateral contracts with other suppliers. The RTOs in New York, New England, and the Mid-Atlantic (PJM) require utilities to procure capacity through an auction. *See* FERC, ENERGY PRIMER: A HANDBOOK OF ENERGY MARKET BASICS (2015), http://www.ferc.gov/market-oversight/guide/energy-primer.pdf.
[25] *Policymaker Summary: Net Metering and Federal/State Jurisdiction*, STATE POLICY PROJECT (last visited Sept. 12, 2016), https://statepowerproject.org/policysummaries/#netmeter.
[26] FERC, Order Accepting Tariff Revisions, 155 ¶ FERC 61,229 (2016).
[27] Order Adopting Regulatory Policy Framework and Implementation Plan (No. 14-M-0101) ((N.Y. P.S.C., Feb. 26, 2015).
[28] 16 U.S.C. § 824a-3(m).
[29] FERC Docket No. AD16-16.
[30] *See, e.g.*, *Allco Finance v. Klee*, no. 16-cv-00508 (D. Conn.); *Winding Creek Solar v. Peevey*, no. 13-cv-04934 (D. No.Cal.).
[31] Matthew L. Wald, *Duke and Progress Energy Become Largest U.S. Utility*, N. Y. TIMES, Jul. 3, 2012.
[32] 16 U.S.C. §824b.
[33] FERC, Order Reaffirming Commission Policy and Terminating Proceeding, 138 FERC ¶ 61,109 (2012).
[34] Letter from Diana L. Moss, President, Am. Antitrust Inst., to William J. Baer, Assistant Att'y Gen., U.S. Dep't of Justice (Feb. 25, 2015), http://antitrustinstitute.org/sites/default/files/Exelon-Pepco_AAI%20letter_2-25-15.pdf.
[35] *See* FERC Docket No. RM16-21.

[36] Brief for the Plaintiff-Appellee, *Solarcity v. Salt River Project Agric., Improvement, & Power Dist.*, no. 15-17302, June 7, 2016, (9th Cir.), *available at* https://www.justice.gov/atr/file/866351/download.

Nicholas Institute for Environmental Policy Solutions

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