

REPORT OF THE POWER GENERATION AND MARKETING SUBCOMMITTEE

In this report, the Subcommittee summarizes key developments in state and federal regulation of power generation and marketing from July 2016 to June 2017.*

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I. FERC NOTICES OF PROPOSED RULEMAKING

On November 17, 2016, the Federal Energy Regulatory Commission (FERC) issued a Notice of Proposed Rulemaking in which it proposed reforms “to remove barriers to the participation of electric storage resources and distributed energy resource aggregations in the [organized] wholesale capacity, energy, and ancillary service markets operated by regional transmission organizations (RTOs) and independent system operators (ISOs).”¹ For purposes of the proposed rulemaking, FERC defined electric storage resources as “resource[s] capable of receiving electric energy from the grid and storing it for later injection of electricity back to the grid regardless of where the resource is located on the electrical system” (*i.e.*, on an interstate transmission system or on a distribution system), and with such resources including, among others, “batteries, flywheels, compressed air, and pumped hydro.”² The FERC defined distributed energy resources as “a source or sink of power that is located on the distribution system, any subsystem thereof, or behind a customer meter” and explained such resources “may include, but are not limited to, electric storage resources, distributed generation, thermal storage, and electric vehicles and their supply equipment.”³

The FERC explained that “[r]esource participation in the organized wholesale electric markets” is governed by the tariff provisions of the RTOs and ISOs that accommodate the participation of resources with particular physical and operational characteristics, and the “technical requirements for market services that those resources are eligible to provide.”⁴ The FERC further explained that the

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1. *Electric Storage Participation in Markets Operated by Regional Transmission Organizations & Independent System Operators*, 157 F.E.R.C. ¶ 61,121, P 1 (2016).

2. *Id.* at P 1 n.1.

3. *Id.* at P 1 n.2.

4. *Id.* at P 2.

RTOs and ISOs do not always establish such participation rules for different types of resources and the technical requirements for providing services in the same way, and that such participation rules can place limitations on the services that certain types of resources are eligible to provide.⁵ The FERC expressed concern that RTOs and ISOs may not be able to update their market rules before a new resource becomes commercially able to sell into the organized wholesale electric markets, requiring the new resource to participate under one of the existing participation rules developed for some other type of resource, resulting in barriers to the participation of new technologies in the organized wholesale electric markets.⁶

Consequently, FERC proposed “to require each RTO and ISO to revise its tariff to establish a participation model consisting of market rules that, recognizing the physical and operational characteristics of electric storage resources, accommodates their participation in the organized wholesale electric markets.”⁷ The FERC also proposed to require each RTO and ISO “to revise its tariff to allow distributed energy resource aggregators, including electric storage resources, to participate directly in the organized wholesale electric markets.”⁸ The FERC also proposed, among other things, to require each RTO and ISO “to establish distributed energy resource aggregators as a type of market participant and allow the distributed energy resource aggregators to register distributed energy resource aggregations under the participation model in the RTO/ISO tariff that best accommodates the physical and operational characteristics of the distributed energy resource aggregation.”⁹ Comments on the proposed rulemaking were due on February 13, 2017.¹⁰ The FERC has not yet issued a final rule as of August 2017.

On December 15, 2016, FERC issued a Notice of Proposed Rulemaking in which it proposed revising “its regulations and the *pro forma* Large Generator Interconnection Procedures and *pro forma* Large Generator Interconnection Agreement.”¹¹ The FERC proposed “reforms designed to improve certainty, promote more informed interconnection, and enhance interconnection processes” with the proposed reforms “intended to ensure that the generator interconnection process is just and reasonable and not unduly discriminatory or preferential.”¹² The fourteen proposed reforms are intended to (i) improve certainty by affording

5. *Id.*

6. 157 F.E.R.C. ¶ 61,121, at P 3.

7. *Id.* at P 3.

8. *Id.* at P 5; *Id.* at P 5 n.13 (FERC “define[d] distributed energy resource aggregators as . . . entit[ies] that aggregate one or more distributed energy resources for purposes of participation in the organized wholesale capacity, energy, and ancillary service markets of the RTOs and ISOs”).

9. *Id.* at P 5.

10. Notice of Extension of Time, *Electric Storage Participation in Markets Operated by Regional Transmission Orgs. & Independent System Operators*, Docket Nos. RM16-23-000 and AD16-20-000 (Dec. 20, 2016).

11. Notice of Proposed Rulemaking, *Reform of Generator Interconnection Procedures & Agreements*, 157 F.E.R.C. ¶ 61,212 (Dec. 15, 2016), 82 Fed. Reg. 4464 (Jan. 13, 2017) [hereinafter Notice of Proposed Rulemaking]; Order No. 2003, *Standardization of Generator Interconnection Agreements & Procedures*, F.E.R.C. STATS. & REGS. ¶ 31,146 (2003), *order on reh’g* Order No. 2003-A, F.E.R.C. STATS. & REGS. ¶ 31,160, *order on reh’g*, Order No. 2003-B, F.E.R.C. STATS. & REGS. ¶ 31,171 (2004), *order on reh’g*, Order No. 2003-C, F.E.R.C. STATS. & REGS. ¶ 31,190 (2005), *aff’d sub nom*; *Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008).

12. Notice of Proposed Rulemaking, *supra* note 11, at 4465.

interconnection customers more predictability in the interconnection process; (ii) improve transparency by providing improved information for the benefit of all participants in the interconnection process; and (iii) enhance interconnection processes by making use of underutilized existing interconnections, providing interconnection service earlier, or accommodating changes in the development process.¹³ More than seventy entities submitted comments during the sixty-day comment period.¹⁴ The FERC has not yet issued a final order regarding the proposed rulemaking as of August 2017.

Also on December 15, 2016, FERC issued a Notice of Proposed Rulemaking regarding fast-start pricing in markets operated by RTOs and ISOs.¹⁵ Specifically, FERC proposed to revise its regulations to require that each RTO and ISO incorporate market rules that meet certain requirements when pricing fast-start resources.¹⁶ With these reforms, FERC aims to generate prices that “more transparently reflect the marginal cost of serving load, [thereby] reduc[ing] uplift costs and improv[ing] price signals to support efficient investments.”¹⁷ Comments on the proposed rulemaking were due on February 28, 2017.¹⁸ A final rule has not been issued as of August 2017.

The proposed rulemaking defines a fast-start resource as a resource that can “start up [in] ten minutes or less, has a minimum run time of one hour or less, and has submit[ted] [an] economic energy offer to a market” run by a RTO/ISO.¹⁹ “Fast-start resources typically are committed in real-time, very close to the interval when . . . needed,” and are capable of quickly “respond[ing] to unforeseen system needs.”²⁰ “As a result of these unique characteristics, RTOs/ISOs have developed pricing specific to the class of [fast-start] resources.”²¹ This regional fast-start “pricing is designed generally to recognize that fast-start resources are . . . in effect, the marginal resources that establish the incremental energy price.”²² In the proposed rulemaking, FERC noted that fast-start resources are not able to set the locational marginal price “because they are often dispatched to their inflexible minimum or maximum operating limits.”²³ Because “fast-start resources are typically committed in real-time very close to the interval when they are needed,” “the cost to commit” them “is incurred at roughly the same time that the incremental energy costs are incurred.”²⁴

13. *Id.* at 4465-66.

14. *Id.* at 4464.

15. Notice of Proposed Rulemaking, *Fast-Start Pricing in Mkts. Operated by Regional Transmission Orgs. & Independent System Operators*, 157 F.E.R.C. ¶ 61,213 (2016) (to be codified at 18 C.F.R. pt. 235) [hereinafter *Fast-Start Pricing*].

16. *Id.* at P 3.

17. *Id.* at P 35.

18. *Id.* at P 4.

19. *Id.* at P 1.

20. *Fast-Start Pricing*, *supra* note 15, at P 39.

21. *Id.* at P 2.

22. *Id.*

23. *Id.*

24. *Id.*

The FERC indicated that existing regional practices in pricing fast-start resources “may not result in” just and reasonable rates and proposed to introduce some practices that may be used to better establish the marginal price.²⁵ The FERC voiced concern that “existing practices may not ensure that prices accurately reflect the marginal cost,” and may “potentially result in prices that do not reflect the value of fast-start resources.”²⁶ As a result, unnecessary uplift payments may persist, and market participants may not be presented with correct incentives to make efficient investments.²⁷

In response to these challenges, FERC proposed to establish five requirements for fast-start pricing.²⁸ First, it proposed to require RTOs/ISOs to “apply fast-start pricing to any committed resource” when that resource has a startup and notification time of ten minutes or less, “has a minimum run time of one hour or less, and [] submits economic energy offers to the market.”²⁹ Second, FERC proposed to include the “commitment costs (*i.e.*, startup and no-load costs)” of fast-start resources in the offer prices used to set energy and ancillary service prices during the minimum run time of the resource.³⁰ Third, FERC proposed to require RTOs/ISOs to “relax the economic minimum of fast-start resources and treat them as dispatchable from zero” megawatts (MW) “for the purpose of calculating prices.”³¹ Fourth, FERC proposed to allow an “offline fast-start resource to set prices” if that resource is feasible and economic for addressing system needs.³² Finally, FERC proposed to require that fast-start pricing be included “in both the day-ahead and real-time markets.”³³

II. FERC ORDER SUMMARY: OFFER CAPS IN MARKETS OPERATED BY REGIONAL TRANSMISSION ORGANIZATIONS AND INDEPENDENT SYSTEM OPERATORS

On November 17, 2016, FERC issued Order No. 831 revising its regulations to require each RTO and ISO to modify the caps applied to incremental energy offers to improve price formation and provide market participants with additional flexibility to recover their costs.³⁴ More specifically, Order No. 831 requires each RTO and ISO to revise its tariff to “cap each resource’s incremental energy offer at the higher of \$1,000/MWh or that resource’s” verified short-run marginal costs.³⁵ Under Order No. 831, the costs underlying an “incremental energy offer

25. *Fast-Start Pricing*, *supra* note 15, at P 3.

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.* at P 44.

30. *Fast-Start Pricing*, *supra* note 15, at P 49.

31. *Id.* at P 3.

32. *Id.* at P 56.

33. *Id.* at P 60.

34. Order No. 831, *Offer Caps in Markets Operated by Regional Transmission Organizations & Independent System Operators*, F.E.R.C. STATS. & REGS. ¶ 31,387, 81 Fed. Reg. 87,770 (2016) (to be codified at 18 C.F.R. pt. 35) [hereinafter Order No. 831].

35. *Id.* at P 42.

above \$1,000/MWh” must be verified by the RTO/ISO for the offer to be used for purposes of calculating locational marginal prices.³⁶ The order further requires that each RTO and ISO provide make-whole payments to resources that are dispatched, but whose costs cannot be verified until after the market clearing process is complete.³⁷ Order No. 831 also provides that cost-based incremental offers in excess of \$2,000/megawatt hours (MWh) would not be eligible to set locational marginal prices, with the resource instead receiving compensation through make-whole payments.³⁸ Order No. 831 also directs each RTO and ISO “to permit market participants to submit virtual transactions up to \$2,000/MWh” to promote “convergence between day-ahead and real-time market[]” prices.³⁹

On May 5, 2017, PJM Interconnection, L.L.C. (PJM), Southwest Power Pool, Inc. (SPP), the New York Independent System Operator, Inc. (NYISO), the Mid-continent Independent System Operator (MISO), and ISO New England Inc., each filed proposed revisions to their tariffs to comply with Order No. 831, which remain pending before FERC as of August 2017.⁴⁰ In addition, on May 11, 2017, FERC issued an order granting the California Independent System Operator Corporation (CAISO) an extension until May 1, 2018 to comply with Order No. 831 to give CAISO additional time to develop tariff “provisions necessary to verify cost-based energy offers” above \$1,000/MWh.⁴¹

III. CFTC ORDER SUMMARY: PRIVATE RIGHT OF ACTION REGARDING CERTAIN RTO/ISO TRANSACTIONS, PARTICIPANTS

In October 2016, the Commodity Futures Trading Commission (CFTC) issued a final order approving the application of “SPP to exempt specific types of transactions from certain provisions of the Commodity Exchange Act (CEA) . . . and [CFTC] regulations.”⁴² In the same order, the CFTC amended, as proposed in May 2016 and reported in Vol. 37:2, an order issued on March 28, 2013 that “exempted other specific transactions from certain provisions of the CEA and [CFTC] regulations.”⁴³

The Dodd-Frank Act of 2010 authorized the CFTC to exempt from most provisions of the CEA certain transactions that are offered or “entered into pursuant

36. *Id.* at PP 139-141.

37. *Id.* at P 146.

38. *Id.* at PP 87, 145.

39. Order No. 831, *supra* note 34, at P 172.

40. *N.Y. Independent System Operator, Inc.*, Order No. 831 Compliance Filing, FERC Docket No. ER17-1561-000 (May 8, 2017); *ISO New England Inc.*, Order No. 831 Compliance Filing, FERC Docket No. ER17-1565-000 (May 8, 2015); *PJM Interconnection, L.L.C.*, FERC Order No. 831 Compliance Filing, Docket No. ER17-1567-000 (May 8, 2017); *Southwest Power Pool, Inc.*, Order No. 831 Compliance Filing, FERC Docket No. ER17-1568-000 (May 8, 2017); *Midcontinent Independent System Operator, Inc.*, Compliance Filing for FERC Order No. 831, Docket No. ER17-1570-000 (May 8, 2017).

41. Notice Extending Time for Compliance, *Offer Caps in Markets Operated by Regional Transmission Organizations & Independent Sys. Operators*, Docket No. RM16-5-000 (May 11, 2017).

42. Final Order, *Southwest Power Pool, Inc. Application to Exempt Specified Transactions; Amendment to the Final Order Exempting Specified Transactions of Certain Independent System Operators & Regional Transmission Organizations*, 81 Fed. Reg. 73,062 (2016) [hereinafter October 2016 Final Order].

43. *Id.*

to a tariff . . . approved by FERC or a state regulatory authority” if the exemption would be in the public interest and meet certain other criteria.⁴⁴ In the March 28, 2013 order, the CFTC exempted specific RTO and ISO transactions pursuant to this authority, but excepted from the exemption its general “anti-fraud and anti-manipulation authority and scienter-based prohibitions under” the CEA, and its implementing regulations of those provisions.⁴⁵ SPP filed an application in October 2013 asking that the CFTC act under its new authority to exempt from most provisions of the CEA, similar to the exemption provided in the RTO/ISO Order, “certain ‘transmission congestion rights,’ ‘energy transactions,’ and ‘operating reserve transactions,’ if [those] ‘transactions are offered or entered into pursuant to’ FERC-approved SPP tariff, as well as to exempt persons (SPP itself, members or market participants) acting with respect to those transactions.”⁴⁶

On February 3, 2015, the U.S. District Court for the Southern District of Texas dismissed a private lawsuit for market manipulation on the ground that section 22 of the CEA was not available to the plaintiffs under the RTO/ISO Order; that decision was later upheld by the Fifth Circuit.⁴⁷ On May 18, 2015, the CFTC issued a proposed order proposing to grant SPP’s request, but not to exempt SPP from the private right of action under CEA section 22.⁴⁸ Consistent with the *Aspire* decisions, in the proposed order, the CFTC stated its view that “the RTO-ISO Order does not prevent private claims for fraud or manipulation under the CEA.”⁴⁹ In May 2016, the CFTC proposed an amendment to “the RTO/ISO Order to explicitly provide that the RTO/ISO Order does not” provide exemption “from the private right of action found in section 22 of the CEA.”⁵⁰ The CFTC sought comments on both proposals.⁵¹

In the October 2016 Final Order, the CFTC adopted the SPP Proposed Order insofar as the CFTC granted SPP’s requested exemptions.⁵² The final order also, however, marked a change in course from the CFTC’s previous determinations, as it issued – in the limited context of activities within the RTO and ISO markets

44. Dodd-Frank Act, 12 U.S.C. § 5301, Public Law 111-203, 124 Stat. 1376 (2010).

45. Final Order, *Petition from Certain Independent System Operators & Regional Transmission Orgs. to Exempt Specified Transactions Authorized by a Tariff or Protocol Approved by the Federal Energy Regulatory Commission or the Public Utility Commission of Texas From Certain Provisions of the Commodity Exchange Act Pursuant to the Authority Provided in the Act*, 78 Fed. Reg. 19,880 (2013) [hereinafter RTO/ISO Order].

46. Notice of Proposed Order & Request for Comment, *Application for an Exemptive Order From Southwest Power Pool, Inc. from Certain Provisions of the Commodity Exchange Act Pursuant to the Authority Provided in section 4(c)(6) of the Act*, 80 Fed. Reg. 29,490, at 29,491 (2015).

47. *Aspire Commodities, L.P. v. GDF Suez Energy N. Am., Inc.*, No. H-14-1111, 2015 WL 500482 (S.D. Tex. 2015); *Aspire Commodities, L.P. v. GDF Suez Energy N. Am., Inc.*, 640 F. App’x 358 (5th Cir. 2016).

48. 80 Fed. Reg. 29,490, at 29,493.

49. *Id.*

50. Notice of Proposed Amendment to and Request for Comment on the Final Order, *Petition From Certain Independent System Operators and Regional Transmission Organizations To Exempt Specified Transactions Authorized by a Tariff or Protocol Approved by the Federal Energy Regulatory Commission or the Public Utility Commission of Texas from Certain Provisions of the Commodity Exchange Act Pursuant to the Authority Provided in the Act*, 81 Fed. Reg. 30,245 (2016).

51. 80 Fed. Reg. 29,490; 81 Fed. Reg. 30,245.

52. October 2016 Final Order, *supra* note 42, at 73,062.

– “a complete exemption from the private right of action in CEA section 22, including with respect to claims based on fraud or manipulation,” agreeing with commenters “that the unique nature of the RTO and ISO markets differentiates this issue from other contexts in which a private right of action is essential.”⁵³ The CFTC noted first that these “markets are heavily regulated by FERC and PUCT [Public Utility Commission of Texas]” and are closely watched by independent market monitors.⁵⁴ In addition, it concluded that “private rights of action appear in tension with the intent of Congress in” the RTO/ISO context, based on the decision not to grant a private right of action for manipulation of these markets in the Energy Policy Act of 2005.⁵⁵ Finally, the CFTC concluded “that there is a potential for private rights of action regarding” RTO and ISO market transactions and related entities “to interfere with FERC and PUCT oversight of these markets.”⁵⁶

IV. ADVANCED ENERGY MANAGEMENT ALLIANCE V. FERC

On June 20, 2017, the U.S. Court of Appeals for the District of Columbia Circuit issued its decision in *Advanced Energy Management Alliance v. FERC* upholding FERC’s decisions issued in 2015 that approved changes to the capacity markets operated by PJM.⁵⁷ As described by the court,

[A]ccording to PJM, the rules were not working. Resource owners were making capacity commitments but not providing electricity when it was needed. The penalties for a capacity resource that did not provide electricity were slight and easily avoided. PJM wanted to establish new enforcement mechanisms to ensure resources that made a capacity commitment provided electricity when called upon.⁵⁸

PJM filed proposed changes to the capacity market provisions of its FERC tariff under section 205 of the Federal Power Act (FPA) that “included the ability to offer capacity at a higher price in the auctions; bonuses for producing additional electricity; and steep penalties for resources that did not meet their capacity commitment, with very limited exemptions.”⁵⁹ In addition, PJM proposed to require

53. 81 Fed. Reg. 73,062, at 73,070-01.

54. *Id.* at 73,071.

55. *Id.*

56. *Id.*

57. *Advanced Energy Mgmt. All. v. FERC* 860 F.3d 656 (D.C. Cir. 2017); *PJM Interconnection, L.L.C.*, 151 F.E.R.C. ¶ 61,208 (2015), *reh’g denied*, 155 F.E.R.C. ¶ 61,157 (2016).

58. *Advanced Energy Mgmt. All.*, 860 F.3d at 660.

59. 16 U.S.C. §824d(a), (b) (2015) (“[a]ll rates and charges . . . by any public utility for or in connection with the transmission or sale of electric energy . . . and all rules and regulations affecting or pertaining to such rates or charges” must be “just and reasonable” and not “undu[ly] preferen[tial]”); *Advanced Energy Mgmt. All.*, 860 F.3d at 660.

capacity resources be able to deliver their committed capacity “for the entire delivery year.”⁶⁰ In addition to the proposed capacity market rule changes, PJM also made a filing with FERC under section 206 of the Federal Power Act asking FERC to find that the new capacity market rules would result in PJM market rules for its energy markets as set forth in the PJM Operating Agreement becoming “unjust and unreasonable.”⁶¹

Appellants argued that FERC failed to evaluate the costs and benefits of the proposed new capacity market rules.⁶² The court rejected this argument, finding that FERC had analyzed the benefits as well as the costs associated with the new rules and its decision to approve the changes in the PJM capacity market mechanisms was not arbitrary and capricious.⁶³ The court outlined FERC’s discussion of the benefits of replacing the old PJM capacity market with a structure that takes into account the performance of the capacity resources at such times as PJM calls upon those resources to produce energy.⁶⁴ The court referenced FERC’s discussion of the unusually cold winter in 2014, commonly referred to as the “polar vortex,” when fossil fuel power plants that had received capacity payments under PJM’s then-existing capacity market structure nevertheless failed to deliver electricity when called upon by PJM in the emergency conditions.⁶⁵ The court found that FERC had considered the benefits in helping to avoid the costs of energy price peaks and system outages, encouraging reliable resources to enter the market by offering the potential for bonus payments and encouraging less reliable resources to exit the market.⁶⁶ The court also determined that FERC weighed the costs associated with the proposed changes in the PJM capacity markets.⁶⁷ The FERC had acknowledged that the new capacity market would increase the costs of obtaining capacity substantially but nevertheless reasonably concluded that “[i]ncreased costs can be ‘just and reasonable’ if the costs are warranted.”⁶⁸ The court affirmed FERC’s decision to approve the rule changes despite the increased costs because, as FERC explained, there were “important non-cost reasons for approving PJM’s proposal. [FERC] does not have to find net savings.”⁶⁹

The court also upheld FERC’s decision granting PJM’s filing under section 206 of the FPA that the capacity market changes it filed for approval under section 205 of the FPA made certain elements of its energy market rules and portions of its Operating Agreement setting forth the energy market rules unjust and reasonable.⁷⁰ Appellants argued that FERC erred in finding the energy market rules unjust and unreasonable under section 206 because the proposed capacity market

60. *Id.*

61. 16 U.S.C. § 824(e); *Advanced Energy Mgmt. All.*, 860 F.3d at 660.

62. *Advanced Energy Mgmt. All.*, 860 F.3d at 660.

63. *Id.* at 661-62.

64. *Id.*

65. *Id.* at 660-61.

66. *Id.* at 662.

67. *Advanced Energy Mgmt. All.*, 860 F.3d at 662.

68. *Id.*

69. *Id.*

70. *Id.* at 663-64 (The energy market rules that FERC determined were unjust and unreasonable under section 206 pertained to operating parameters, force majeure, and generator outages).

changes had only been filed and had not yet had an impact.⁷¹ The court, however, saw

[N]o reason why the Commission was not entitled to approve changes under section 206 in anticipation of the impacts of the section 205 filing rather than wait for those impacts to be realized. Moreover, the Commission did not rely solely on the section 205 changes. It specifically found that certain existing energy market rules were unjust and unreasonable in light of basic capacity market objectives.⁷²

The court deferred to FERC's reasonable interpretation of the statute that it administers.⁷³

Appellants also challenged FERC's approval of a penalty formula based on an estimate of thirty emergency hours in a year, which they argued was unreasonably high based upon historical experience.⁷⁴ As the court explained,

[P]etitioners' real concern is the effect the number thirty has on the overall penalty. Because the estimated number of emergency hours is in the denominator, a higher estimate results in a lower penalty. If the penalty rate is too low, resources can make money by participating in the capacity market even if they fail to perform during emergency hours. This could encourage resources to make a capacity commitment without investing in their resources to be able to meet the commitment.⁷⁵

The court cited information in the record that the estimate of thirty hours was within the range in recent years, and that expected increases in natural gas fired generation in PJM "could cause PJM to declare emergency hours more frequently in coming years."⁷⁶ The court concluded that FERC had "explained why it chose thirty hours and pointed to supporting evidence in the record" and thus, it would "not disturb its decision."⁷⁷

Appellants also challenged FERC's approval of PJM's requirement that capacity resources be committed on a year-round basis, asserting that the requirement unduly discriminates against seasonally variable resources such as solar and wind and demand response.⁷⁸ The court held that FERC adequately supported its conclusions:

71. *Id.* at 663.

72. *Advanced Energy Mgmt. All.*, 860 F.3d at 664.

73. *Id.* at 14.

74. *Id.* at 673.

75. *Id.* at 666.

76. *Id.*

77. *Advanced Energy Mgmt. All.*, 860 F.3d at 666.

78. *Id.* at 668-69.

The year-round capacity commitment is at the core of what PJM expects of capacity resources and the essential attribute of its revised market rules. . . . Even if, as the environmental petitioners claim, some measurement of reliability other than annual capacity availability is just and reasonable, the relevant question here is whether the annual standard the commission approved is just and reasonable. . . . The commission's policy decision to assess reliability through a year-round capacity commitment is the type of policy judgment to which we afford deference, and that deference is justified by the record.⁷⁹

The court also deferred to FERC's determination that a capacity seller that PJM did not schedule to operate in the emergency conditions could, in certain circumstances, be subject to the penalty provisions in PJM's new market rules.⁸⁰ "[I]f the reason PJM did not schedule the resource to operate is . . . due to the seller's own operating-parameter limitations or . . . because the seller offered its energy at a market-based price that was higher than its cost-based price," the resource would be penalized.⁸¹ The court determined that FERC's explanation was reasonable, and "defer[red] to its conclusion that operating limits cannot excuse nonperformance. . . ."⁸²

V. STATE PROGRAMS TO DETER RETIREMENT OF NUCLEAR GENERATION

On August 1, 2016, the New York State Public Service Commission approved an order adopting a Clean Energy Standard (the CES Order).⁸³ The CES Order requires half of the state's electricity "to be produced by renewable sources by 2030 as part of a strategy to reduce statewide greenhouse gas emissions by 40%" in that time, with an aggressive phase-in schedule over the next several years.⁸⁴ In its initial phase, utilities and other energy suppliers will be required to procure and phase in new renewable power resources starting with 26.32% of the state's total electricity load in 2017 and grow to 30.54% of the statewide total in 2021.⁸⁵ One component of the CES Order is the establishment of a mechanism and price, Zero Emission Credit (ZEC), "for zero-emissions attributes of nuclear zero-carbon electric generating facilities where public necessity to encourage the continued creation of the attributes is demonstrated."⁸⁶ Opponents of the ZEC program filed a lawsuit in October 2016 challenging the nuclear subsidies, arguing

79. *Id.* at 669-70.

80. *Id.* at 674.

81. *Id.* at 673.

82. *Advanced Energy Mgmt. All.*, 860 F.3d at 674.

83. *Order Adopting a Clean Energy Standard*, Cases 15-E-0302, 16-E-0270, <https://www.nysersda.ny.gov/All-Programs/Programs/Clean-Energy-Standard>.

84. *Id.* at 2.

85. *Id.* at 15.

86. *Id.* at 19.

that they intrude on federal jurisdiction of wholesale power markets.⁸⁷ On July 25, 2017, the U.S. District Court for the Southern District of New York dismissed the lawsuit.⁸⁸

On December 1, 2016, the Illinois General Assembly passed Senate Bill 2814, subsequently entered into law on December 7, 2016.⁸⁹ Known as the Future Energy Jobs Act (FEJA), the law became effective on June 1, 2017.⁹⁰ The main provisions of the FEJA address energy efficiency, renewable energy, low income customers, jobs, and the establishment of a zero emission standard.⁹¹ Pursuant to the FEJA, “Illinois’ biggest utilities are required to reduce electricity waste,” which is expected to “. . . lower [consumer] power bills by billions of dollars.”⁹² The FEJA fixes state renewable energy laws with the intent of sparking new investment to develop wind and solar power in Illinois, and it also launches a community solar program.⁹³ “The [FEJA] devotes \$750 million to low-income programs that [is expected to] provide training for new energy jobs and help consumers cut utility bills.”⁹⁴ “The [FEJA] is expected to spark tens of thousands of jobs connected to improvements in efficiency and renewable energy.”⁹⁵ The FEJA also calls for subsidies of up to “. . . \$235 million per year [] for ten years to keep open two nuclear power plants in [the state].”⁹⁶ Two sets of plaintiffs subsequently challenged the FEJA on multiple grounds, with the appeals recently being dismissed.⁹⁷

On January 13, 2017, Connecticut lawmakers introduced a bill to provide, among other things, a mechanism for the Millstone nuclear generating facilities in Waterford, Connecticut to participate in a state renewable energy procurement program.⁹⁸ While the bill passed the Senate before the end of the 2017 legislative session, it was never brought up for a vote in the House and stalled there.⁹⁹ On July 25, 2017, Connecticut’s governor signed an executive order directing the Connecticut Department of Energy and Environmental Protection (DEEP) and Public Utilities Regulatory Authority (PURA) to conduct a resource assessment

87. See generally Complaint, *Coal. for Competitive Elec. v. Zibelmen*, No. 16-CV-8164 (VEC) (S.D.N.Y. 2016).

88. *Coal. for Competitive Elec. v. Zibelmen*, No. 16-CV-8164 (VEC), 2017 WL 3172866 (S.D.N.Y. July 25, 2017).

89. See generally S.B. 2814, 99th Gen. Assemb., Reg. Sess. (Ill. 2016).

90. *Id.* at 21.

91. *Id.* at 35.

92. Matt Kulling, *What is the Future Energy Jobs Act? CUB Analyzes Illinois’ Biggest Energy Legislation in Years*, CITIZENS UTIL. BD. (Mar. 22, 2017), <https://citizensutilityboard.org/blog/2017/03/22/future-energy-jobs-act-cub-analyzes-illinois-biggest-energy-legislation-years/> [hereinafter CUB].

93. S.B. 2814, *supra* note 89, at 19.

94. CUB, *supra* note 92.

95. *Id.*

96. *Id.*

97. See generally *Vill. of Old Mill Creek v. Anthony M. Star*, Case No. 17 CV 1163 (N.D. Ill. 2017); *Elec. Power Supply Ass’n v. Anthony M. Star*, Case No. 17 CV 1164 (N.D. Ill. 2017); *appeal dismissed* Docket Nos. 17 CV 1163, 17 CV 1164 (N.D. Ill. 2017).

98. S.B. 106, 2017 Gen. Assemb., Jan. Sess. (Conn. 2017).

99. Gavin Bade, *Conn. House Fails to Pass Millstone Nuke Support Bill*, UTILITY DIVE (June 8, 2017), <http://www.utilitydive.com/news/connecticut-house-fails-to-pass-millstone-uke-support-bill/444560>.

to review the “economic viability for the continued operation of the Millstone nuclear generating facilities” and the best mechanisms for the state to meet its carbon emissions targets at the least cost while maintaining grid reliability.¹⁰⁰ In response, DEEP and PURA initiated proceedings and intend to produce a report by February 1, 2018.¹⁰¹

On April 6, 2017, Ohio lawmakers introduced Senate Bill 128 that would affect customers who have a nuclear plant in their service territory.¹⁰² The bill as written “[c]reates [a] zero-emissions nuclear resource (ZENR) program that requires electric distribution utilities (EDUs), including an EDU with a ZENR located in its certified territory, to purchase zero-emissions nuclear credits (ZENCs) and recover the purchase costs through a nonbypassable rider imposed on retail electric service customers.”¹⁰³ “Participation in the program is mandatory for EDUs in Ohio that have a ZENR within their certified territory.”¹⁰⁴ “[A]ll EDUs in the same holding company system must also participate jointly and allocate costs across all classes of each participating utility’s customers.”¹⁰⁵ Critics of the proposed bill argue that it would subsidize Ohio’s aging and uneconomic nuclear power plants with the customer-paid ZENCs, to the detriment of other generators in a competitive market.¹⁰⁶ While the chairman of the Ohio House Public Utilities Committee suspended further hearings and a vote on the proposed bill, the Ohio Senate’s Public Utilities Committee held four hearings in the spring without reaching a conclusion.¹⁰⁷ Over forty witnesses submitted written testimony, much of it in opposition.¹⁰⁸ A vote of the full Senate is expected in the fall of 2017.¹⁰⁹

100. CONN. EXEC. ORDER NO. 59, <http://portal.ct.gov/-/media/32CB330A0E0B415284EB60E71C54C1A6.pdf> (last visited Sept. 18, 2017).

101. Notice of Proceeding, *DEEP and PURA Joint Proceeding to Implement the Governor’s Executive Order No. 59*, Docket No. 17-07-32 (2017).

102. S.B. 128, 132d Gen. Assemb., Reg. Sess. 2017 (Ohio 2017); See H.B. 178, 132d Gen. Assemb., Reg. Sess. (Ohio 2017) [hereinafter House Bill 178].

103. S.B. 128 at § 4928.751; Kathleen A. Luikart, *Bill Analysis*, OHIO LEGISLATIVE SERVICE COMMISSION (Apr. 6, 2017), <https://www.legislature.ohio.gov/download?key=6933&format=pdf>.

104. Luikart, *supra* note 103, at 3.

105. *Id.*

106. See House Bill 178; *Hearing on H.B. 178 before the Pub. Util. Comm. of the Ohio House of Reps.*, 132d Gen. Assemb. (2017) (testimony of Edward W. [Ned] Hill, Ph.D.).

107. John Funk, *FirstEnergy Nuclear Hearings Suspended in Ohio House*, THE PLAIN DEALER (May 17, 2017), http://www.cleveland.com/business/index.ssf/2017/05/firstenergy_nuclear_hearings_s.html [hereinafter Ohio House]; John Funk, *FirstEnergy’s Nuclear Zero Emission Credits May Have Stalled*, THE PLAIN DEALER (June 8, 2017), http://www.cleveland.com/business/index.ssf/2017/06/firstenergys_nuclear_zero_emiss.html [hereinafter Zero Emission Credits].

108. Ohio House, *supra* note 107; Zero emission credits, *supra* note 107.

109. Zero emission credits, *supra* note 107.

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