ORAL ARGUMENT SCHEDULED FOR FEBRUARY 14, 2017

Nos. 16-1234, 16-1235, 16-1236, and 16-1239

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

ADVANCED ENERGY MANAGEMENT ALLIANCE, et al.,

Petitioners,

v.

FEDERAL ENERGY REGULATORY COMMISSION,

Respondent.

On Petitions for Review of Orders of the
Federal Energy Regulatory Commission

FINAL JOINT REPLY BRIEF OF PETITIONERS ADVANCED ENERGY MANAGEMENT ALLIANCE, AMERICAN PUBLIC POWER ASSOCIATION, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, NEW JERSEY BOARD OF PUBLIC UTILITIES, PUBLIC POWER ASSOCIATION OF NEW JERSEY, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, UNION OF CONCERNED SCIENTISTS, AND AMERICAN MUNICIPAL POWER, INC.

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* Authorities upon which we chiefly rely are marked with asterisks.

GLOSSARY OF TERMS

"The Act"	Federal Power Act, 16 U.S.C. §§ 824 *et seq*.
AEMA	Advanced Energy Management Alliance, petitioner in Case No. 16-1234
Amici Br.	Brief of Amici Curiae in Support of Respondent, Nos. 16-1234 *et al*. (Dec. 9, 2016)
AMP	American Municipal Power, Inc., petitioner in Case No. 16-1239
APPA	American Public Power Association, petitioner in Case No. 16-1235
Base Capacity*	A temporary product allowing seasonal resources to continue participating in capacity auctions, up to a certain cap, during the transition period
Base Residual Auction*	PJM's primary annual capacity-market auction, in which PJM procures commitments to provide electricity during a delivery year three years in the future. For example, PJM's May 2017 Base Residual Auction will procure commitments for delivery year 2020/2021.
Capacity Performance Filing	PJM's proposal to amend its capacity-market rules by introducing Capacity Performance, filed with FERC under Federal Power Act section 205. *See* PJM, "Reforms to the Reliability Pricing Market (RPM) and Related Rules in the PJM Open Access Transmission Tariff (Tariff) and Reliability Assurance Agreement Among Load Serving Entities (RAA)," FERC Docket No. ER15-623 (Dec. 12, 2014) (CIR 2, JA 0001).
CIR	Item number in the Certified Index to the Record

Cost of New Entry (CONE)*	PJM's estimate of the revenue that a new combustion turbine generator would require from the capacity market
Energy Market Filing	PJM's complaint to amend its energy market rules, filed with FERC under Federal Power Act section 206. *See* PJM, "Proposed Revisions to the PJM Open Access Transmission Tariff and PJM Operating Agreement," FERC Docket No. EL5-29 (Dec. 12, 2014) (CIR 3, JA 0103).
Environmental Petitioners	Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists, petitioners in Case No. 16-1236
Exelon Comments	Comments and Partial Protest of Exelon Corporation, FERC Docket No. ER15-623 (Jan. 20, 2015) (CIR 183, JA 0395)
FERC or "the Commission"	Federal Energy Regulatory Commission
FERC Br.	Brief of Respondent FERC, Nos. 16-1234 *et al.* (Nov. 23, 2016)
IMM Rehearing Request	Limited Rehearing Request of the Independent Market Monitor, FERC Docket No. ER15-623 (July 6, 2015) (CIR 317, JA 1181)
Incremental Auction*	PJM's smaller capacity-market auctions, held closer to the target delivery year, adjusting the capacity procured in the Base Residual Auction
JA	Page number in the Joint Appendix (deferred)
Joint Consumers' Answer	Answer of Joint Consumer Representatives, FERC Docket No. ER15-623 (Mar. 11, 2015) (CIR 268, JA 0898)

Joint Consumers' Deficiency Protest	Protest of Joint Consumer Representatives to PJM Deficiency Response, FERC Docket No. ER15-623 (Apr. 24, 2015) (CIR 296, JA 0970)
Joint Consumers' Protest	Protest of the Joint Consumer Representatives, FERC Docket No. ER15-623 (Jan. 20, 2015) (CIR 180, JA 0297)
Joint Consumers' Rehearing Request	Rehearing Request of the Joint Consumer Representatives, FERC Docket No. ER15-623 (July 9, 2015) (CIR 344, JA 1365)
Montalvo Aff.	Affidavit of Marc D. Montalvo in Support of Reply Comments of the Transition Coalition, attached to Reply of the Transition Coalition, FERC Docket No. ER15-623 (Feb. 23, 2015) (CIR 243, JA 0827)
NJBPU	New Jersey Board of Public Utilities, petitioner in Case No. 16-1235
NRECA	National Rural Electric Cooperative Association, petitioner in Case No. 16-1235
P	Paragraph number in a FERC order
Pet. Br.	Joint Opening Brief of Petitioners, Nos. 16-1234 *et al*. (filed Sept. 23, 2016)
PJM	PJM Interconnection, L.L.C.
PJM Answer	Answer of PJM Interconnection, L.L.C., FERC Docket No. ER15-623 (Feb. 13, 2015) (CIR 240, JA 0683)

PJM Deficiency Response	PJM Interconnection Response to Deficiency Letter, FERC Docket No. ER15-623 (Apr. 10, 2015) (CIR 279, JA 0932)
PPANJ	Public Power Association of New Jersey, petitioner in Case No. 16-1235
Public Interest Protest	Protest of Public Interest Organizations, FERC Docket No. ER15-623 (Jan. 20, 2015) (CIR 181, JA 0350)
Public Interest Rehearing Request	Rehearing Request of Public Interest Organizations, FERC Docket No. ER15-623 (July 9, 2015) (CIR 345, JA 1395)
Public Interest Rehearing Supplement	Supplement to the Rehearing Request of Public Interest Organizations, FERC Docket No. ER15-623 (Feb. 5, 2016) (CIR 409, JA 1410)
Rehearing Order	FERC's decision denying Petitioners' rehearing requests, *PJM Interconnection, L.L.C.*, *Order on Rehearing and Compliance*, 155 FERC ¶ 61,157 (May 10, 2016) (CIR 312, JA 0994)
Reliability Pricing Model*	PJM's capacity-market construct, which PJM revised with the Capacity Performance Filing
Resp't-Int. Br.	Brief of Intervenors in Support of Respondent, Nos. 16-1234 *et al.* (Dec. 9, 2016)
RTO	Regional Transmission Organization, as defined at 18 C.F.R. § 35.34
Rutigliano Aff.	Affidavit of Thomas A. Rutigliano on Behalf of Public Interest Organizations, attached to Supplement to the Rehearing Request of Public Interest Organizations, FERC Docket No. ER15-623 (Feb. 5, 2016) (CIR 409, JA 1426)

Schnitzer Aff.	Prepared Direct Testimony of Michael M. Schnitzer on Behalf of Exelon Corporation, attached to Comments and Partial Protest of Exelon Corporation, FERC Docket No. ER15-623 (Jan. 20, 2015) (CIR 183, JA 0480)
Section 205	Section 205 of the Federal Power Act, 16 U.S.C. § 824d
Section 206	Section 206 of the Federal Power Act, 16 U.S.C. § 824e
Tariff Order	FERC's decision approving PJM's Capacity Performance proposal, *PJM Interconnection, L.L.C., Order on Proposed Tariff Revisions*, 151 FERC ¶ 61,208 (June 9, 2015) (CIR 312, JA 0994)
Transition period	A temporary period, ending with the May 2017 Base Residual Auction (for Delivery Year 2020/2021), during which PJM procures a limited amount of Base Capacity in its auctions in addition to Capacity Performance
Transition auctions	Two incremental auctions conducted in 2015 that replaced 60% and 70% of the capacity already procured for the 2016/2017 and 2017/2018 Delivery Years, respectively, with Capacity Performance resources

* Terms marked with an asterisk are authoritatively defined or described in PJM's tariff. *See* Capacity Performance Filing, Attachment B, "PJM Open Access Transmission Tariff and PJM Reliability Assurance Agreement" 50 (Dec. 12, 2014) (CIR 2). In some cases, the definitions provided in this Glossary have been simplified for clarity.

SUMMARY OF ARGUMENT

FERC and its supporters' briefs do not justify upholding FERC's orders. FERC failed to apply the appropriate statutory procedure and burden of proof; it failed to support its conclusion that PJM's rule changes are just and reasonable and not unduly discriminatory; and it arbitrarily accepted PJM's rule changes despite serious design flaws. PJM's Capacity Performance proposal, as adopted, will impose billions of dollars in new costs on consumers. Yet, in the words of FERC Chairman Norman C. Bay—whose dissents FERC and its supporters largely ignore—we still "do not know whether consumers [will] pay a just and reasonable rate for capacity, and . . . whether they will receive the service they are purchasing." Rehearing Order 11 (Bay, dissenting) (JA 1604). FERC's orders are not "the product of reasoned decision making." *Id.*

ARGUMENT

I. FERC's Approval of Capacity Performance Was Unlawful

A. FERC and its supporters have not reconciled the orders' contradictory findings with the statute's requirements[1]

FERC approved PJM's capacity-market filing as just and reasonable, while finding that this approval rendered PJM's energy-market rules unjust and unreasonable. That was arbitrary and capricious. FERC and its supporters mischaracterize the issue as challenging PJM's tariff-filing rights under section 205 of the Federal Power Act, 16 U.S.C. § 824d. *See* FERC Br. 35; Resp't-Int. Br. 14. Not so—PJM does not have a right to FERC's *approval* of its section 205 tariff filing, especially when FERC finds that the approval makes another PJM tariff unlawful and triggers FERC's duty to fix the latter tariff under section 206, 16 U.S.C. § 824e. FERC does not abrogate PJM's tariff-filing rights if FERC exercises its authority to find that PJM's filing is not just and reasonable and instead orders changes to PJM's capacity- and energy-market rules under section 206.

[1] This argument is presented by APPA, NRECA, and PPANJ. FERC questions PPANJ's joining in this argument because only APPA and NRECA raised it on rehearing. FERC Br. 33 n.5. But PPANJ jointly petitioned for review with APPA and NRECA, and it can support an argument by them without separately intervening and briefing the issue.

FERC notes that PJM suggested FERC could approve the capacity-market changes without ordering the energy-market changes. FERC Br. 34. But FERC did not do that, and its orders "cannot be upheld unless the grounds upon which the agency acted in exercising its powers were those upon which its action can be sustained." *SEC v. Chenery*, 318 U.S. 80, 95 (1943). Similarly, Respondent-Intervenors argue that if FERC had acted on the two filings sequentially—and presumably independently—there would be no problem. Resp't-Int. Br. 18-19. But that assumes away the inconsistency in FERC's orders.

Respondent-Intervenors, but not FERC, argue that FERC did approve the energy-market changes independently, and that paragraph 400 of the Tariff Order should be disregarded in favor of FERC's immediately following rulings on particular energy-market changes. Resp't-Int. Br. 17. But Intervenors cannot cherry-pick FERC's language and discard what is inconvenient. Like any other text, the words in FERC's Order "are not pebbles in alien juxtaposition," but "have only a communal existence," in Judge Learned Hand's phrase, where the meaning of each word informs the others. *NLRB v. Federbush Co.*, 121 F.2d 954, 957 (2d Cir. 1941).

FERC argues that the inconsistency in its statutory findings can be ignored because it made findings on PJM's section 205 capacity-market filing that would

suffice for ordering the same changes under section 206. FERC Br. 36. But FERC's section 205 findings in these orders would not have sufficed if FERC had ordered all the tariff changes under section 206. As explained in our Opening Brief, Pet. Br. 55-56, when FERC exercises its authority under section 206 to establish the just and reasonable rate, tariff, or agreement for a public utility, reasoned decision-making requires FERC to consider alternatives to any proposal by the utility. Neither FERC nor Intervenors dispute that point. Here, FERC's Rehearing Order stated that because PJM filed the capacity-market changes under section 205, FERC did not need to consider lower-cost alternatives to PJM's filing. Rehearing Order P 37 (JA 1471). That FERC ruling precludes the Court from upholding FERC's orders as if FERC acted under section 206.

FERC claims it approved ISO New England's capacity-market proposal without assessing alternatives. FERC Br. 36-37. In fact, FERC found that neither the ISO's proposal nor an independent alternative were just and reasonable, before it ordered tariff changes under section 206. *See ISO New England Inc.*, 147 FERC ¶ 61,172 PP 23-25 (2014), *reh'g denied*, 153 FERC ¶ 61,223 (2015), *pet. for review pending sub nom. New England Power Generators Ass'n v. FERC*, Nos. 16-1023 *et al.* (D.C. Cir. filed Jan. 19, 2016). FERC's procedure here entertained no alternatives.

Respondent-Intervenors argue that the Court should excuse FERC's inconsistent actions because reviewing courts cannot precisely define the just-and-reasonable standard. Resp't-Int. Br. 19. But the standard's flexibility cannot excuse facially irrational agency findings. FERC cannot reasonably find that a PJM unilateral tariff change is statutorily lawful but at the same time find that this change makes a related PJM tariff, which PJM cannot unilaterally change, statutorily unlawful, necessitating FERC remedial action. FERC failed to "'articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.'" *PPL Wallingford Energy LLC v. FERC*, 419 F.3d 1194, 1198 (D.C. Cir. 2005) (quoting *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

B. FERC lacks substantial evidence for concluding that PJM's proposal would yield just and reasonable rates[2]

FERC insists that it did consider the costs and benefits of Capacity Performance, but its answering brief, like the orders on review, is thin on specifics. In the circumstances here—where PJM's own initial estimate acknowledged that Capacity Performance would impose billions of dollars in costs on consumers, yet

[2] This argument is presented by APPA, NJBPU, PPANJ, NRECA, Environmental Petitioners, and AMP. Petitioners' opening brief inadvertently omitted NJBPU from the list of parties presenting this argument. NJBPU joins this argument, which it raised in its rehearing petition and statement of issues. Joint Consumers' Rehearing Request 2 (JA 1367).

failed to identify *any* quantified net benefits in average years—FERC's vague and generalized assertions that it gave due consideration to the proposal's anticipated costs and benefits do not constitute reasoned decision-making. FERC must show its work, and it failed to do that here.

FERC and its supporters spend much of their briefs arguing that resource-performance concerns—particularly forced outages of fuel-burning generators, which occurred most notably during the 2014 Polar Vortex—warranted changes to PJM's capacity market. *See* FERC Br. 22-23; Resp't-Int. Br. 4-7. Petitioners do not disagree these forced outages should be minimized, or that PJM could reasonably have decided to modify its capacity-market rules, although Petitioners do disagree with the intimation that PJM's capacity market was on the brink of failure. In fact, as discussed in Petitioners' opening brief, (1) no customers lost power during the Polar Vortex, and PJM never claimed that it fell short of its reliability standard (the one-day-in-ten-years loss of load expectation); (2) targeted solutions like winterization had, by 2015, significantly improved the performance of the fuel-burning generators that failed the previous year; and (3) by PJM's own projections, it was on track to meet its reserve margins through 2019 even without any capacity-market changes. *See* Pet. Br. 31-32, 71.

Petitioners' claims, however, do not depend on whether or not any changes to PJM's capacity-market rules were warranted. Rather, Petitioners argue that FERC failed to show that PJM's proposed changes would yield benefits that justified the costs, such that the resulting rates would be "just and reasonable." 16 U.S.C. § 824d. FERC's task was to decide whether PJM's proposal could reasonably be expected to improve reliability; if so, by how much; and whether those benefits justified the costs to consumers. To answer these questions, FERC should have "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Wallingford*, 419 F.3d at 1198 (internal quotation marks omitted). This it failed to do.

In its brief, FERC asserts that it did "address[] concerns about costs and explain[] its determination that, balancing all factors, the proposal was just and reasonable." FERC Br. 29 (citing Tariff Order P 49 (JA 1015) and Rehearing Order P 31 (JA 1469)). Yet the two paragraphs FERC cites reveal no such explanation. In the Tariff Order, FERC noted that it "does not generally require the mathematical specificity of a cost-benefit analysis" and held that "on balance and in light of other changes on which we condition our acceptance, we find the proposal to be just and reasonable." Tariff Order P 49 (JA 1015). FERC offered no

citations to the record and no detailed explanation of how it struck that "balance." *Id.*

In the Rehearing Order, FERC reaffirmed its conclusion in equally vague terms:

> Balancing multiple considerations, we continue to find that PJM's capacity market revisions, as modified, are just and reasonable. We conclude that, based on the record in this proceeding, the reliability benefits of PJM's proposal are significant. Customers will receive greater assurance that the resources needed to keep their lights on will deliver when needed because the Capacity Performance reforms will incentivize better performance and penalize poor performance, thereby allowing PJM to meet its reliability objective at a reasonable cost over time.

Rehearing Order P 31 (JA 1469). Again, FERC offered no record citations. FERC asserted that Capacity Performance will impose "reasonable cost[s] over time," *id.*, but it made no finding as to what those costs would be. Merely saying that "costs [we]re an important consideration in our decision-making," *id.* P 30 (JA 1467), does not make it so.

Similarly, FERC referenced "significant" reliability benefits, *id.* PP 31, 34 (JA 1469, 1470), but it made no finding as to *how much more* reliable it expected the system to become, and compared to what baseline. And, while FERC averred that it "[b]alance[d] multiple considerations" in reaching its decision, *id.* P 31 (JA 1469), it "did not explain what its 'balancing' entailed, or how it applied the non-

cost factors." *TransCanada Power Mktg. v. FERC*, 811 F.3d 1, 13 (D.C. Cir. 2015); *see also Sithe/Indep. Power Part., LP v. FERC*, 165 F.3d 944, 949-50 (D.C. Cir. 1999) (granting petition where FERC failed to "reveal[] the data and assumptions underlying its findings").

These are conclusory statements, not reasoned explanations. FERC cannot discharge its statutory duty by stating its conclusion and vaguely asserting that it based that conclusion on "multiple considerations" and "the record in this proceeding," Rehearing Order P 31 (JA 1469), without engaging with the record and making findings to support the reasonableness of the proposal before it. *See United Airlines, Inc. v. FERC*, 827 F.3d 122, 131 (D.C. Cir. 2016) ("FERC cannot rely in conclusory fashion on its knowledge and expertise without adequate support in the record."); *TransCanada*, 811 F.3d at 13 ("[W]hen the Commission chooses to refer to non-cost factors in ratesetting, it must . . . offer a reasoned explanation of how the relevant factors justify the resulting rates" (internal quotation marks and brackets omitted)).

FERC contends that the Court nevertheless owes deference to its "'predictive judgments and policy choices.'" FERC Br. 26 (quoting *Elec. Consumers Res. Council v. FERC*, 407 F.3d 1232, 1239 (D.C. Cir. 2005)). Yet even a "highly deferential standard of review demands an articulation, in response

to serious objections, of the Commission's reasons for believing that more good than harm will come of its action." *Elec. Consumers Res. Council*, 407 F.3d at 1238-39. Here, despite uncontroverted evidence of billions of dollars of additional costs to consumers, numerous critiques by Petitioners and others, and two cogent dissents by Chairman Bay, FERC failed to provide a specific, reasoned explanation for concluding that Capacity Performance would cause "more good than harm." *Id*.

In fact, in all the paragraphs FERC cites, *see* FERC Br. 26-33, there is *only one citation* to record evidence: two pages in the Schnitzer affidavit, submitted with Exelon's partial protest. *See* Rehearing Order P 34 (JA 1470) (citing Schnitzer Aff. 8-9 (JA 0488-89)). As Petitioners explained in their opening brief, Pet. Br. 61-63, and as FERC concedes, Schnitzer's estimate "depended" on using a "different calculation of the non-performance charge" than the one PJM proposed and FERC ultimately accepted. FERC Br. 28.

FERC now points to a *different* part of Schnitzer's affidavit, which states that if FERC accepted PJM's proposal without making the adjustments Schnitzer recommended, "'the net benefits shown by my analysis will be much lower'"—a statement FERC interprets as evidence that the benefits would still be "significant" and "would still exceed costs." *Id.* 28-29 (citing Schnitzer Aff. 100 (JA 0580)). Yet FERC did not rely on the Schnitzer affidavit for this proposition during the

administrative process. And with good reason: Schnitzer did not characterize the benefits in such a scenario as "significant." *See* Schnitzer Aff. 100 (JA 0580). In fact, in the same paragraph that FERC now cites, Schnitzer suggests there would be no net benefits in such a scenario: "If the performance penalties and other provisions are not adequate" to achieve reliability benefits—which, he averred, they were not—then "the benefits shown by my analysis *will not materialize*." *Id.* (emphasis added); *see also id.* 98 (JA 0578) ("If PJM fails to appropriately calibrate the hourly performance penalties as I recommend . . . I believe that the . . . proposal will likely fall short of its reliability goals."); Exelon Comments 40 (JA 0438) ("The significant benefits outlined above can *only* be realized . . . if PJM correctly implements the C[apacity] P[erformance] framework. Unfortunately, PJM's proposal fails to do so in critical ways that will prevent PJM from addressing its reliability needs." (emphasis added)). In light of these caveats, the language on which FERC now relies does not provide substantial evidence for finding PJM's proposal just and reasonable.

Respondent-Intervenors contend that "FERC was entitled to rely" on Schnitzer's calculation of benefits despite rejecting his other recommendations. Resp't-Int. Br. 13. That skips over the more basic question FERC needed to answer—whether Capacity Performance, as adopted, will actually improve

reliability. Schnitzer's affidavit provides no support for—and in fact undermines—FERC's conclusion that it will. Moreover, if FERC had determined that it could selectively apply Schnitzer's calculated benefits to PJM's unmodified proposal, it would have needed to explain why the relevant assumptions remained constant. FERC did not do this.[3] Respondent-Intervenors' argument is an impermissible "post hoc" rationalization—and not even one that FERC itself has endorsed. *TNA Merch. Projects, Inc. v. FERC*, 616 F.3d 588, 593 (D.C. Cir. 2010).

FERC and Respondent-Intervenors attempt to distinguish *TransCanada* as a case involving an "out of market" program, *see* FERC Br. 30-31; Resp't-Int. Br. 13-14, but nothing in that decision suggests that the basic requirements of reasoned decision-making are inapplicable when FERC is reviewing auction rules. FERC cannot shirk its duty to ensure just and reasonable rates simply by positing that "market forces" will produce them. FERC Br. 31.[4] Whether considering market or

[3] FERC not only said nothing about the assumptions underlying Schnitzer's analysis; it also ignored competing analyses in the record that offered different assessments of PJM's reliability under the status quo and Capacity Performance. *See, e.g.*, Montalvo Aff. 5 (JA 0831) (critiquing Schnitzer's "unrealistic assessment of the reliability problems" under the status quo); Rutigliano Aff. 5-6, 10 (JA 1431-32, 1436) (testifying that eliminating Base Capacity and transitioning to 100% Capacity Performance in the 2018/2019 auction would result in increased costs and a net loss in reliability).

[4] FERC may not "resort[] to largely undocumented reliance on market forces as the principal means of rate regulation." *Blumenthal v. FERC*, 552 F.3d 875, 882

out-of-market constructs, FERC must contend with evidence in the record and support its determination that the rules are just and reasonable. That is particularly so where, as here, the record contains unrebutted evidence that the rule change will impose billions of dollars in costs on consumers, and where PJM's own initial calculations identified no net benefits in *any* years except possibly those with "extreme" weather events. PJM Answer 16-17 (JA 0705-06).

FERC's supporters suggest that PJM's failure to identify any net benefits in average years is irrelevant because the capacity market's purpose is to ensure adequate supply not for the average year, but for the extreme year. *See* Resp't-Int. Br. 12; Amici Br. 14-15. Yet PJM concededly "did not attempt" to estimate the reliability benefits it expected to achieve even in those "extreme" years, PJM Answer 16-17 (JA 0705-06); nor did it estimate how frequently such "extreme"

(D.C. Cir. 2009) (internal quotation marks omitted). PJM's capacity market is "structurally non-competitive," Tariff Order P 12 (JA 1003), and depends on a suite of "mitigation" measures to preserve competition. As Chairman Bay explained in his dissent, Capacity Performance introduces "serious design flaw[s]" that undermine the effectiveness of those mitigation measures. Tariff Order 1, 3 (Bay, dissenting) (JA 1175, 1177); *see also* Pet. Br. 84-97. Moreover, the new rules make the market even less competitive by unnecessarily constraining the types of resources that may participate, and disadvantaging renewable and demand resources even though they offer cost-effective capacity and helped maintain reliability during the 2014 Polar Vortex. *See* Pet. Br. 67-76; *see also* Public Interest Protest 21 (JA 0371) (citing Market Monitor analysis indicating that eliminating competition from demand response and energy efficiency would increase costs to consumers).

years might occur. Without that information, FERC had no basis for concluding that the additional costs Capacity Performance will impose on consumers annually are a reasonable price to pay. It is not reasonable, for example, to spend billions ensuring that the system will meet demand during a once-in-a-hundred-year storm if the standard for reliability—a one-day-in-ten-years loss of load expectation—does not require it. As Chairman Bay explained in his dissent, "if billions are spent on a problem, there ought to be *some* improvement," but that alone does not make the decision to spend billions just and reasonable. Rehearing Order 3 (Bay, dissenting) (emphasis added) (JA 1596). The question is whether the improvement is worth the cost. FERC offered no reasonable basis for determining that it is.

C. Capacity Performance unduly discriminates against renewable and demand-side resources[5]

1. Environmental Petitioners preserved their discrimination argument

FERC incorrectly asserts that Petitioners have not preserved the argument that Capacity Performance unduly discriminates against seasonal resources. FERC Br. 56-57. Environmental Petitioners presented this argument in both their protest and rehearing request, which focused on PJM's prejudicial transition to 100% Capacity Performance and its elimination of the "Base Capacity" category. That

[5] Environmental Petitioners present this argument.

"Base Capacity" category includes seasonal and renewable resources like demand response, wind power, and solar power—the same resources highlighted in Petitioners' opening brief. *See* Pet. Br. 67-68.

Specifically, Environmental Petitioners' Protest contended that PJM's proposal "would unduly discriminate against certain renewable energy and demand-side resources," which they defined as including "demand response" and "wind and solar." Public Interest Protest 1-2 & n.5 (JA 0351-52); *see also id.* 11 (JA 0361) (describing "B[ase] C[apacity] generation" as including "demand response and wind"); *id.* 12 (JA 0362) (arguing that PJM's "annual availability requirement imposes disparate burdens on . . . [n]on-fuel based resources"). FERC did not respond to Environmental Petitioners' argument in its Tariff Order.

In their Rehearing Request, Environmental Petitioners again argued that "eliminating the Base Capacity product eliminates the ability of certain resources to participate" in the capacity market, even though those resources "could help PJM meet its resource adequacy needs more cost effectively." Public Interest Rehearing Request 11 (JA 1406). Immediately thereafter, in the footnote acknowledged by FERC, Petitioners identified these "certain resources" as including "variable renewable . . . resources" and "non-fuel-based resources," and

further explained that PJM's aggregation mechanism would not cure the discriminatory impact. *Id.* 11 n.24 (JA 1406).

Petitioners' argument in the *body* of their Rehearing Request—that PJM's proposal unfairly excluded "certain resources" from the capacity market, and that eliminating the Base Capacity product and procuring 100% Capacity Performance products was "unduly discriminatory"—preserved their discrimination claim. *Id.* 10-11 (JA 1405-06). The footnote puts a finer point on this argument, but the argument itself was not "'tucked away in a footnote,'" as FERC asserts. FERC Br. 57 (citation omitted). Nor is this is a case in which the rehearing request contained only a "mere reference to an earlier filing," as FERC suggests. *Id*. 58. Petitioners' discussion in their Rehearing Request, although brief, fully preserves the argument. *See, e.g.*, *City of Vernon v. FERC*, 845 F.2d 1042, 1047 (D.C. Cir. 1988); *La. Intrastate Gas Corp. v. FERC*, 962 F.2d 37, 41-42 (D.C. Cir. 1992). Indeed, the brevity of Environmental Petitioners' discussion was reasonable given FERC's failure to respond at all in its initial order. *See Columbia Gas Transmission Corp. v. FERC*, 404 F.3d 459, 462 (D.C. Cir. 2005) (a terse rehearing request was adequate when FERC offered only a half-sentence rejection in its initial order).[6]

[6] In its Rehearing Order, FERC again neglected Environmental Petitioners' argument—but it did respond to a similar argument that PJM's proposal unduly discriminates against "non-year-round" demand response resources. Pet. Br. 72-73

To be sure, Petitioners' opening brief uses plainer language to describe the discriminatory impact of PJM's proposal, referring to "resources . . . whose availability inherently varies by season, such as wind power, solar power, and demand response," Pet. Br. 67, rather than using more technical terms like "Base Capacity product," "variable" resources, and "non-fuel-based" resources. The substance of their argument, however, is the same.

2. PJM's rule change unduly discriminates against seasonal resources

PJM's rule change effectively excludes seasonal resources—wind energy, solar energy, and demand response—from the capacity market by phasing out the Base Capacity product and transitioning to 100% Capacity Performance. *See* Pet. Br. 67-76; *see also* Capacity Performance Filing 28 (JA 0035) (recognizing that "movement to a single Capacity Performance Resource product . . . could impact seasonal capacity resources"). Base Capacity resources, while nominally required to be available year-round, are subject to "Non-Performance Charges only for their

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(quoting Rehearing Order P 59 (JA 1478)). On appeal, Environmental Petitioners focus on the deficiencies in FERC's analysis of that similar argument, assuming that FERC implicitly rejected their discrimination argument for the same reasons. If, however, FERC contends that this portion of its Order is *not* responsive to Environmental Petitioners' discrimination argument, then its failure to respond by itself warrants a remand. "It is well established that the Commission must respond meaningfully to the arguments raised before it." *TransCanada*, 811 F.3d at 12 (internal quotation marks omitted).

performance during Emergency Actions in the summer months" when PJM experiences peak demand. Capacity Performance Filing 49 (JA 0056). As PJM acknowledged, this summer-only penalty "provide[s] a strong incentive for these [seasonal] resources to perform well in the summer, consistent with the manner in which the region has relied on these resources in the past," while avoiding penalties for winter non-performance that "would likely be merely punitive." *Id.*

PJM's prior capacity-market framework procured primarily annual resources,[7] but seasonal resources could, and did, participate as capacity resources. *See* Capacity Performance Filing 28 (JA 0035). The shift to 100% Capacity Performance, however, will exclude seasonal resources, like solar energy and demand response based on air conditioning use, that cannot upgrade to perform in their "off season" to avoid the year-round penalties assessed under PJM's new rules. Pet. Br. 33. Because year-round penalties will not incentivize better year-round performance by resources with inherent seasonal variability like wind, solar, and demand response, Capacity Performance imposes an arbitrary one-size-fits-all

[7] *See* Capacity Performance Filing 2 (JA 0009) (describing "Base Capacity" as "essentially the existing capacity product but with enhanced assurance of delivery of energy and reserves during hot weather operations"). Two exceptions to this annual commitment period are the limited and extended summer demand response resources that PJM eliminated with the shift to Capacity Performance. *See* Rehearing Order PP 55, 59 (JA 1477-78).

performance rule that is "merely punitive" and discriminates against seasonal resources. Capacity Performance Filing 49 (JA 0056); *see also* Pet. Br. 73.[8]

Notably, FERC does not deny that procuring 100% Capacity Performance will disparately impact seasonal resources like wind, solar, and demand response. FERC Br. 59-62. Instead, FERC argues that this disparate impact is justified because "allowing non-year-round resources to participate in the capacity performance market *could* result in a loss of reliability in those resources' lower-performing seasons." *Id*. 60 (citing Rehearing Order P 59 (JA 1478) (emphasis added)). FERC's Rehearing Order cited no support for this hypothesis, *see* Rehearing Order P 59 (JA 1478), and it ignores the reality that PJM's capacity needs vary predictably across seasons, with distinct summer and winter peaks. *See* Capacity Performance Filing, Attachment C, ¶ 9 (JA 0096). PJM needs more capacity in summer, and nothing in the record suggests that procuring *some* summer-only capacity resources would necessarily threaten winter reliability.[9]

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[8] FERC has elsewhere determined that it may be appropriate to "account for the special circumstances presented by intermittent [i.e., seasonal] generators and their limited ability to precisely forecast or control generation levels, such as waiving the more punitive adders associated with higher deviations." *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 72 Fed. Reg. 12,266, P 663 (2007).

[9] PJM noted that procuring too many Base Capacity demand response and energy efficiency resources, and too few year-round resources, could affect its

Instead, the record shows that the problem for winter reliability is the failure of committed resources to perform during the winter, rather than the overall quantity of committed resources for the winter period. *See* Capacity Performance Filing 6 (JA 0013) (arguing that PJM's prior rules had "been successful in securing capacity *commitments*" but did not "adequately ensure actual *performance*" (second emphasis added)). Indeed, record evidence suggests that eliminating Base Capacity (i.e., seasonal resources) would raise costs with no net gains in reliability, and possibly a net loss. *See* Rutigliano Aff. 5-6, 10 (JA 1431-32, 1436). In the 2015 Base Residual Auction for delivery year 2018/2019, PJM procured 20% of its capacity from Base Capacity resources, resulting in a loss-of-load expectation of about one day in *fifty* years—a result that far surpasses PJM's one-day-in-ten-years reliability objective. *Id.* 10 (JA 1436).

Aggregation does not ameliorate the discriminatory impact of Capacity Performance, as FERC asserts, FERC Br. 61, because it imposes barriers to the participation of seasonal resources that are not justified by PJM's reliability needs. FERC cited no basis for concluding that 100% of PJM's capacity portfolio must be

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ability to meet demand in non-summer emergency conditions. *See* Capacity Performance Filing 68-69 (JA 0075-76). Contrary to Respondent-Intervenors' assertion, however, this does not mean that "participation of seasonal demand response would impair reliability." Resp't-Int. Br. 24. Instead, it shows that PJM must procure resources in a way that matches seasonal needs, rather than procuring excessive summer-only resources.

available year-round. Absent such a showing, requiring seasonal resources to aggregate with other resources to piece together year-round availability is an arbitrary barrier to their participation in the market. The record before FERC demonstrated market participants' concerns about the burden associated with aggregation, *see*, *e.g.*, AMP Protest 9, 20-25 (JA 0621, 0624-29), and in fact, no aggregated offers were submitted in the first Base Residual Auction conducted under the new rules, *see* Public Interest Rehearing Supplement 8 n.17 (JA 1418) (citing PJM's draft problem statement).

Respondent-Intervenors protest that Environmental Petitioners did not specifically propose six-month procurement periods in their rehearing request, Resp't-Int. Br. 23, but Petitioners do not ground their discrimination claim on the acceptability of any specific alternative proposal. Instead, Petitioners simply offer seasonal procurement as an example of one non-discriminatory way PJM could meet its seasonal capacity needs and allow seasonal resources to participate without diminishing reliability. *See* Pet. Br. 74. Petitioners' contention on rehearing was that by retaining a limited amount of Base Capacity, rather than moving to 100% Capacity Performance, PJM could allow seasonal resources to continue participating in the market on non-discriminatory terms. FERC offered no

response. Its conclusion that PJM's proposal was not unduly discriminatory is unsupported by reasoned analysis or substantial evidence.

II. FERC Erred in Approving Particular Aspects of the Capacity Performance Proposal

A. FERC's unsupported acceptance of PJM's demand response performance measurement rules contradicts precedent[10]

1. Capacity Performance is unduly discriminatory and therefore unnecessarily costly

FERC describes "capacity" as "the ability to produce electricity when necessary." FERC Br. 2. However, demand resources avoid consuming energy, rather than producing it like generators. AEMA challenges FERC's acceptance of PJM's arbitrary rules because they measure demand resource performance when that performance is *unnecessary*.

These anti-competitive rules unduly penalize demand resources because they assess performance at times when these resources are not needed. The rules will force many valuable resources, such as residential air conditioning control programs, out of PJM's markets.

AEMA shows that the Capacity Performance rules unduly discriminate against seasonal resources and unnecessarily increase costs. Eliminating Base

[10] This argument is presented by AEMA.

Capacity effectively extinguishes opportunities for seasonal resources, including residential aggregations, to participate in PJM's capacity market. PJM's measurement and verification rules indirectly achieve the same anti-competitive end. The resulting supply constraints will unnecessarily increase costs for consumers.

2. PJM's rules are discriminatory because they fail to compensate demand resources for balancing supply and demand

Demand resources should be fairly compensated for balancing supply and demand. This is the compensation principle cited by FERC. FERC Br. 71. This principle is consistent with holdings in *La. Pub. Serv. Comm'n v. FERC*, 184 F.3d 892 (D.C. Cir. 1999); *Town of Norwood v. FERC*, 962 F.2d 20 (D.C. Cir. 1992); and *Delmarva Power & Light Co.*, 24 FERC ¶ 61,199 (1983).

Determination of compensation for capacity resources differs between organized wholesale markets and cost-of-service ratemaking. The former typically uses auctions; the latter relies on evidentiary process. However, these differences are irrelevant because FERC's pricing policy is not at issue. The issue is whether seasonal demand resources will be paid for providing seasonal capacity—not at what price.

Commission precedent dictates that demand resources be compensated for capacity they provide when PJM avoids procuring capacity from others. PJM's systemwide peak demand, which occurs in the summer, determines the amount and cost of capacity PJM procures. *See supra* Section I(C). When seasonal loads curtail demand at peak times, they reduce by a like amount the capacity PJM procures. However, demand resources, such as controllable air conditioning, that can only reduce summer peak demand, will not be credited for the summer capacity they provide. PJM's new rules compensate demand resources for the lesser of the capacity they provide in summer or winter. Therefore, PJM's new rules do not compensate these resources for balancing supply and demand. In fact, these new rules require these customers to pay for capacity they do not need.

FERC has not explained its rationale for breaking the link between contribution and compensation. FERC's brief confuses pricing policy and performance measurement. *See* FERC Br. 70. The issue is not precision or accuracy. The relevant question is what to measure and when.

3. FERC failed to explain its changed position

On appeal, FERC argues for the first time that it actually approved these PJM rules in 2011, and that, therefore, its acceptance of Capacity Performance was soundly reasoned. This after-the-fact argument is not grounded in fact. FERC

concluded PJM's proposal "reasonably balances the flexibility and accuracy of the baseline." Rehearing Order P 122 (JA 1505). FERC noted PJM's proposal includes alternative "baselines," but did not substantively address AEMA's argument that using the baseline, or "recent-peak," method is altogether inappropriate.

FERC mischaracterizes its 2011 decisions in claiming that it has "approved" the "recent-peak" methodology. FERC Br. 71. While FERC has accepted PJM tariff filings with recent-peak methodologies in two circumstances, neither contradicts the fact that using "recent-peak" in the case of seasonal demand resources in PJM's capacity market is inappropriate and contradicts prior FERC policy.

First, FERC approved "recent-peak" as a measure of demand resource participation in PJM's energy market, where market participants are dispatched and paid market prices for energy delivered, or demand reduced, in real time. *See, e.g.*, *PJM*, 137 FERC ¶ 61,216, P 61 (2011) ("[E]ffective participation of demand response in its economic dispatch requires that PJM . . . calculate the actual demand reduction level that can be expected from that dispatch."). This application is distinct from that of capacity markets, where an auction procures capacity for an entire future year. It makes sense to measure contributions to "real-time" energy markets by measuring the contribution demand resources make in each energy

pricing interval using recent usage patterns. It does not make sense to use this energy market measure to assess the value customers contribute when they agree to avoid consumption during peak periods three years in advance for a twelve-month period.

Second, FERC approved the "recent-peak" method in 2011 for use in a limited set of circumstances where the demand resource elected to offer a Guaranteed Load Drop, a commitment to reduce consumption by a prescribed amount from one moment to the next. In this case, which involved a small minority of demand resources that participate as Guaranteed Load Drop resources, FERC accepted the "recent-peak" methodology because of the distinct link between the commitment made and the measurement criteria. *See PJM*, 135 FERC ¶ 61,212, P 70 (2011). That linkage has not been demonstrated in the case of broadly applicable Capacity Performance rules.

FERC ignores that capacity markets are long-term in nature and balance supply with forecasted demand well in advance of delivery. In 2011, FERC affirmed the long-term nature of capacity markets in an extensive proceeding and stated, "The [Peak Load Contribution] provides PJM with an estimate of peak period performance in future delivery years based on a customer's historic peak demand and is the specified limit under the tariff to the amount of capacity that an

individual resource can commit in a capacity auction." *PJM*, 137 FERC ¶ 61,108, P 64 (2011). Yet, in the instant matter FERC accepted without justification that an estimate of peak period performance is appropriately based on "recent-peak" (forty-five days or less) methods. FERC's failure to adequately explain its departure from prior reasoning is arbitrary and capricious and warrants remand with vacatur to allow seasonal resource participation while alternatives are considered.

B. FERC erred in approving the default offer cap[11]

FERC's acceptance of the default offer cap was arbitrary and capricious and results in an unjust and unreasonable rate. FERC accepted a default offer cap that replaced the former unit-specific cap, eliminates key market power mitigation measures, and allows resources to exercise market power in formulating bids up to the default offer cap.

FERC characterizes Petitioners' challenge to the default offer cap as a misunderstanding of the competitive market and counters that FERC relied upon "sound economic theory" in accepting the default offer cap. FERC Br. 38. Petitioners do not here dispute use of a single clearing price in the Reliability Pricing Model as Respondent-Intervenors contend. Resp't-Int. Br. 30-31. Rather,

[11] This argument is presented by NJBPU, APPA, PPANJ, NRECA, and AMP (herein, "Petitioners").

Petitioners challenge the unjust and unreasonable results arising from FERC's decision to dispense with the Reliability Pricing Model—which worked reasonably well and was expected to continue doing so despite generator retirements, Rehearing Order 1 (Bay, dissenting) (JA1594)—in favor of Capacity Performance.

Capacity Performance replaces a market structure that, according to PJM, sought to simulate a competitive market with one that does not. Under the Reliability Pricing Model rules, offers were effectively capped at the unit-specific Net Avoidable Cost Rate, which was said to replicate competitive market fundamentals and competitive market behavior. Pet. Br. 86. It is uncontested that the Reliability Pricing Model cleared new and existing capacity at prices the Independent Market Monitor considered competitive. Joint Consumers' Rehearing Request 14 (JA 1379); PJM Deficiency Response 3 (JA 0935). FERC has thus concluded that the single-price auction, under the Reliability Pricing Model, "simulated the rates produced in a competitive market in which the same price is paid to all suppliers based on the *marginal cost* of the least efficient [highest priced] supplier necessary to serve that market." *Md. Pub. Serv. Comm'n v. PJM Interconnection, LLC*, 127 FERC ¶ 61,274, P 15 (2009) (emphasis added).

With Capacity Performance, FERC approved a comprehensive capacity-market transformation that arbitrarily allows resources more latitude when making

offers than had been allowed previously. FERC claims that a resource is "*free* to base its offer on *all costs, risks, and relevant system parameters* that a rational seller would consider, including opportunity costs." FERC Br. 46 (emphasis added). FERC thus concedes that, under Capacity Performance, resources may manipulate their offers to include more than marginal cost. Granting resources the freedom to base their offers on all costs, without mitigation, allows for the exercise of market power. As a result, those inflated, unmitigated offers, and ultimately the clearing price, are unjust and unreasonable.

Respondent-Intervenors' own examples demonstrate how the capacity performance design allows resources wide latitude to exercise market power. Resp't-Int. Br. 34. In one scenario, Intervenors explain how a resource can "test its theory that it can earn more" by engaging in strategic behavior. *Id.* In Intervenors' example, a resource may engage in strategic behavior in formulating its offer under the guise of "account[ing] for opportunity costs." *Id.* 34. Given this structurally non-competitive market, the latitude to adjust an offer for non-specified, non-documented opportunity costs represents an invitation to exercise market power. Intervenors try to deflect attention from this reality by employing the phrase "account[ing] for opportunity costs," *id.*, which in this context could only represent an exercise of market power. But this phrasing cannot conceal the reality that a

resource's unchecked manipulation of its offer to "test its theory that it can earn more" is precisely the type of market manipulation that yields unjust and unreasonable results. FERC's allowance of such offers is an arbitrary and capricious shift away from fundamental economic principles.

Moreover, it is uncontested that the default offer cap in Capacity Performance functions as a safe harbor, protecting bidders from Independent Market Monitor scrutiny as to market manipulation. PJM will not apply unit-specific market power mitigation (based on unit-specific net avoidable costs) of seller offers below the default offer cap, and the Independent Market Monitor does not review costs or the possible exercise of market power for any offers below the cap. Resources can exercise market power without fear of mitigation so long as their offers are below the administratively determined default offer cap. This freedom to exercise market power renders the offers, and ultimately the clearing price, unjust and unreasonable.

Nevertheless, FERC's supporters maintain that, by definition, offers up to the default offer cap are competitive and need no scrutiny to curb market power abuse; referencing the testimony of PJM and the Independent Market Monitor, they urge deference to FERC's conclusion that the new offer cap is based upon actual and legitimate costs. Resp't-Int. Br. 32-36; Amici Br. 23-24. Evidence in the

record that is contrary to PJM's and the Independent Market Monitor's position received little to no consideration by FERC. For instance, several parties challenged that the default offer cap was too high to represent a competitive offer from a low (avoidable) cost resource and noted the lack of evidence that the default offer cap had any relation to the costs to be incurred by existing resources. *See* Joint Consumers' Rehearing Request 17-19 (JA 1382-84); Ohio Consumers' Rehearing Request 28 (JA 1332); APPA/NRECA Rehearing Request 22 (JA 1361). FERC "must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *Motor Vehicle Mfrs. Ass'n.*, 463 U.S. at 43 (internal citation omitted). FERC deferred to PJM's statements without conducting its own analysis of the record evidence that challenged PJM's position. FERC's action does not constitute reasoned decision-making.

Finally, Amici inappropriately introduce the clearing prices for the 2018/2019 and 2019/2020 transition auctions under Capacity Performance; this evidence is not in the record. Amici Br. 28-29. Yet, this new evidence undermines the central arguments of FERC and Amici, both of which claim that the default offer cap accurately reflects a competitive offer of a low-cost resource. FERC Br. 39; Amici Br. 24. The introduced evidence reveals that the high-cost resources that

ultimately set the single clearing price managed to clear the auction $74.50 *below* the default offer cap for the 2018/2019 delivery year. These same high-cost resources cleared the auction $126.44 *below* the default offer cap for the 2019/2020 delivery year. Amici Br. 28-29. Given that significant disparity, FERC and Amici cannot now claim that the default offer cap must be set as high as it is under Capacity Performance to attract offers from low cost resources. If high-cost capacity has cleared at offer prices substantially below the FERC-adopted default offer cap in two consecutive years, it is illogical to contend that a low-cost unit with sunk investment costs cannot do so. Instead, this new evidence further reveals how dramatically disconnected the default offer cap is from competitive offers, and why FERC should not have adopted it. FERC erred in adopting the default offer cap.

C. FERC erred in adopting the non-performance charge design[12]

FERC also erred in adopting PJM's inflated initial proposal for thirty estimated Performance Assessment Hours. Tariff Order P 163 (JA 1055). Chairman Bay explained in his dissenting opinions that the default offer cap and the non-performance charge are related design flaws, which he analogized as two carrots and a partial stick. Rehearing Order 4 (Bay, dissenting) (JA 1597). He

[12] This argument is presented by NJBPU and PPANJ.

concluded that the majority's failure to adequately consider the design of the market—in addition to the costs of Capacity Performance and potential benefits versus costs—was not the product of reasoned decision-making. Rehearing Order 11 (Bay, dissenting) (JA 1604). Petitioners agree. NJBPU and PPANJ identified these two design flaws in several filings below. *See* Joint Consumers' Protest (JA 0298); Joint Consumers' Deficiency Protest (JA 0970); Joint Consumers' Answer (JA 0898); Joint Consumers' Rehearing Request (JA 1365). NJBPU and PPANJ expressly challenged the market design flaws because they are central to FERC's error in approving Capacity Performance. *See* Joint Consumers' Rehearing Request 8 (JA 1373). Therefore, contrary to FERC's claim, FERC Br. 43, this argument is properly before the Court.

The estimated number of Performance Assessment Hours used directly relates to the calculation of the non-performance charge, the "stick" in Chairman Bay's analogy. As Chairman Bay explained, the higher the number of hours, the lower the penalty charge. Rehearing Order 6 (Bay, dissenting) (JA 1599). If FERC had chosen a more accurate, lower number of hours, a seller would face greater consequences for failing to meet its obligations; thus, the incentive to perform (one of the objectives of Capacity Performance) would increase. *Id*.

FERC arbitrarily chose thirty as the estimated number of RTO-Wide Performance Assessment Hours in a given year, even though the record indicated that if a more accurate, lower number had been used, it would have produced a more effective penalty. Tariff Order PP 117-119 (JA 1039-40); Rehearing Order PP 63-64 (JA 1480). Chairman Bay challenged the thirty-hour estimate in his dissenting opinions. Tariff Order 3-4 (Bay, dissenting) (JA 1177-78); Rehearing Order 6-8 (Bay, dissenting) (JA 1599-601). Intervenor Exelon also objected below to the use of a thirty-hour estimate for the hourly penalty rate, calling it "deeply flawed" and noting that it would result in much more modest penalties than intended. Exelon Comments 40-47 (JA 0438-45). Notably, the Independent Market Monitor, an Intervenor on appeal, also objected to the use of a thirty-hour estimate, finding it not adequately supported. IMM Rehearing Request 10-11 (JA 1191-92). The Independent Market Monitor recommended that FERC modify its Tariff Order to use the historical three-year rolling average—a solution that PJM and Petitioners also recommended. *Id*.; Joint Consumers' Rehearing Request (JA 1372); PJM Answer 64-65 (JA 0753-54). FERC did not discuss PJM's three-year rolling average proposal in its orders.

In its brief, FERC does not claim that it considered PJM's alternative proposal. As noteworthy, the brief of Intervenors PJM and the Independent Market Monitor is silent on this issue.

FERC had an obligation to consider the record before it. None of the parties supporting FERC have argued that FERC considered the three-year rolling average and dismissed that proposal for rational reasons. Instead, FERC merely restates sections from the Tariff Order as justification for the thirty-hour estimate, FERC Br. 47-50, while providing no further explanation for how a thirty-hour estimate, represents a "middle ground." *Id.* 49. This error overlooks comments in the record, including the Independent Market Monitor's, which stated "the average of the RTO-wide [Performance Assessment Hours] in the last three years was 14 hours including the 30 hours in delivery year 2013-2014 that resulted primarily from January 2014." IMM Rehearing Request 11 (JA 1192). Again, FERC provides no explanation for why the cited "dynamic nature of the PJM fleet" or the "unpredictability of the weather," FERC Br. 49, favors a fixed number of thirty RTO-wide Performance Assessment Hours rather than a rolling three-year average. FERC also fails to respond to the argument that the same rationale could be applied to any number, including the average, which falls "within the range of hours seen in recent years." Pet. Br. 96.

Finally, FERC again fails to address arguments that other mathematical devices are available to improve the Performance Assessment Hours calculation and effectiveness of the penalty mechanism. One such device was a 1.5 divisor for the selected number of Performance Assessment Hours. Pet. Br. 95. Although Petitioners NJBPU and PPANJ raised these arguments repeatedly below, *see* Joint Consumers' Rehearing Request 12 (JA 1377); Joint Consumers' Protest 12-14 (JA 0982-84); Joint Consumers' Answer 9-10 (JA 0907-08); Joint Consumers' Protest 11-16 (JA 0308-13), FERC did not consider them in the Tariff Order, and they received only a passing mention on rehearing. Rehearing Order P 64 (JA 1480). Now, on appeal, the silence signifies an inability to defend against the challenge.

Generally, FERC claims that finding a rate "just and reasonable does not require finding that the proposal 'is more or less reasonable than alternative rate designs.'" FERC Br. 51 (citing *Cities of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984)). However, *Bethany* bears little resemblance to the facts presented here, where even PJM acknowledged that reliance on the Polar Vortex year provided a "poor source" for performance assessment hours and offered the three-year rolling average in a later filing. PJM Answer 64-65 (JA 0753-54).The issue here is not whether FERC reasonably chose among alternatives, but that FERC failed to review the record before it when approving Capacity Performance, as

evidenced by its lack of discussion of PJM's statements. FERC's acceptance of a thirty-hour estimate without further analysis of the record evidence does not constitute reasoned decision-making.

D. FERC's defense of its treatment of unit-specific operating parameters is unavailing[13]

FERC argues that there is no inconsistency between capacity rules that impose non-performance penalties if a resource is not scheduled due to its unit-specific operating parameters and energy market rules that provide "make-whole" payments if PJM requires a resource to operate outside its unit-specific parameters. FERC Br. 53. According to FERC, the differing treatment reflects the "different purposes" of the capacity rules and the energy market rules. *Id.* FERC's argument is unavailing.

Unit-specific operating parameters embody real-world limitations on the physical ability of generators to respond to dispatch instructions as quickly or in the manner PJM directs. While some types of generators are able (as designed or upgraded) to respond to a broad range of dispatch instructions, others may be able to operate outside their operating parameters only by incurring higher-than-normal fuel costs (costs that the energy market "make-whole" payment is meant to cover). But still other units, due to design or technology, have little or no ability to operate

[13] This argument is presented by AMP.

beyond their unit-specific parameters at *any* cost. The output level of a nuclear generating unit, for example, cannot be changed as quickly as a gas turbine, no matter how much money is invested for the purpose. Unit-specific parameters simply reflect that different generating technologies *unavoidably* have different operating characteristics.

PJM's energy market rules give weight to these differences by compensating units for the added costs they incur to exceed their unit-specific operating parameters when directed. PJM's capacity rules, on the other hand, give no weight to those limitations; in fact, the capacity rules *penalize* a resource whenever PJM would have run a unit based on its cost but elected not to because of the unit's operating limits. The energy-market rules treat the limits as legitimate constraints; the capacity rules do the opposite. This is the fundamental inconsistency FERC seeks to dismiss by its assertion of "different purposes," FERC Br. 53, but FERC's rationale is unpersuasive.

For the owners of generating units that are subject to operating limitations, PJM's capacity rules make it difficult (if not impossible) to avoid penalties. If such a unit is dispatched but fails to meet PJM dispatch instructions due to operating limitations, it would be penalized; alternatively, if the unit would have been run (based solely on its cost) but wasn't because the dispatcher took its operating

limitations into account, the resource owner *still* would be penalized. The only way the unit can avoid penalties is to offer to operate in a way that it physically cannot. But just as the law will not compel a party to do that which is impossible,[14] neither will it countenance penalties that cannot be avoided. FERC applied that principle in *El Paso Natural Gas Co*., 145 FERC ¶ 61,040, P 358 (2013) and *El Paso Natural Gas Co*., 139 FERC ¶ 61,096, P 47 (2012), where it rejected as unjust and unreasonable penalty charges that a class of customers could not avoid. FERC chose not to apply the same principle here, however, and failed to explain the departure from its own recent rulings. In this way, its action was arbitrary and capricious. *See Motor Vehicle Mfrs. Ass'n*., 463 U.S. at 57 (agency must provide reasoned analysis for changing course).

E. FERC fails to excuse unreasonable and discriminatory limitations on resource aggregation[15]

1. Limitation by resource type

FERC argues that allowing aggregation only by non-conventional resources is reasonable because, unlike conventional resources, no reasonable amount of investment can mitigate the non-performance risks they face. FERC Br. 63. FERC,

[14] *See* Pet. Br. 109-10 (citing *Hughey v. JMS Development Corp*., 78 F.3d 1523, 1530 (11th Cir. 1996)).

[15] This argument is presented by AMP.

however, does not address the lack of record support for this distinction. *See* Pet. Br. 101. FERC, however, must demonstrate that it has made a reasoned decision based upon substantial evidence in the record. *See Sithe*, 165 F.3d at 948. FERC's decision limiting aggregation to non-conventional resources fails this test.

FERC expresses no disagreement with AMP's assertion that some conventional resources also may be unable to mitigate non-performance risk, as FERC claims is the case for non-conventional resources. FERC nevertheless contends it was not unreasonable to structure the rule based on "general characteristics." FERC Br. 63. To be sure, a rule based on general characteristics is easier to design than one that accommodates finer differences, but ease of design is an insufficient justification where reliance on general categories has the effect of imposing materially greater burdens on some entities than others who are similarly situated. *See Ala. Elec. Co-op., Inc. v. FERC*, 684 F.2d 20 (D.C. Cir. 1982).

PJM thus had the burden of proving the absence of undue discrimination in an aggregation rule that differentiates in an important way between non-conventional and conventional generating units even though the two resource types provide similar services in the PJM region. *See Elec. Consumers Res. Council v. FERC*, 747 F.2d 1511, 1515 (D.C. Cir. 1984) (*per curiam*) ("If a rate design has different effects on charges for similar services to similar customers, the

utility bears the burden of justifying these different effects."). A utility can meet that burden by offering a valid reason for the disparity or by demonstrating that the disparity is as small as practical under the circumstances. *Ala. Elec. Co-op.*, 684 F.2d at 29. Here, FERC ruled (in effect) that PJM carried the burden with the claim that expanding aggregation to conventional resources could transform the capacity-market bidding process "to a portfolio bidding approach," a change that FERC asserts was "unnecessary" and inconsistent with PJM's individual-unit bidding approach. FERC Br. 63-64. In so stating, FERC revealed its application of an incorrect standard for deciding whether discrimination is undue; the "necessity" of adopting a non-discriminatory rule is not the standard for deciding the lawfulness of a rule that *is* discriminatory. In fact, in deciding that it was "unnecessary" to adopt an approach that would be non-discriminatory in effect, FERC effectively skipped the question whether the difference in treatment resulting from the rule was justified. But if a distinction among similarly situated customers is not justified, eliminating it is "necessary" *simply as a matter of complying with the statute*. 16 U.S.C. § 824d(b); *see Ala. Elec. Coop.*, 684 F.2d at 30.

Finally, it bears noting that allowing broader aggregation among resource types would have benefited consumers by enhancing competition in capacity resources. *See* Pet. Br. 102-03. Because the purpose of the Act is to protect

consumers, *see, e.g.*, *Pub. Systems v. FERC*, 606 F.2d 973, 979 n.27 (D.C. Cir. 1979), and because the need for that protection is greatest where markets are deficient, allowing aggregation by conventional as well as non-conventional units deserved FERC's careful consideration. FERC committed error by instead rejecting broader aggregation in conclusory terms and without any demonstration reliability would suffer as a result. *See, e.g.*, *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43; *TransCanada*, 811 F.3d at 12. And the claim by FERC's supporters that aggregation that includes conventional resources would create verification problems, Resp't-Int. Br. 26, is meritless; the claim lacks record support and could just as easily be leveled against the resource aggregation FERC *did* approve.

2. Limitation by location

PJM offered in its answer to protests that aggregation across Locational Deliverability Areas was feasible and outlined how that could work. PJM Answer 25-26 (JA 0714-15). FERC argues that PJM's offer to allow aggregation across Locational Deliverability Areas "was not fully developed" or substantiated because PJM had not accounted for the effects of transmission constraints or explained how its proposal was consistent with certain aspects of the Capacity Performance construct that FERC views as Locational Deliverability Area-specific. FERC Br. 64.

The short answer is that PJM *did* address these areas of concern. *See* Pet. Br. 106-07. But rather than undertaking a reasoned analysis of PJM's proffer, *see TransCanada*, 811 F.3d at 12, FERC simply said it wasn't persuaded aggregation across Locational Deliverability Areas would be feasible "in all circumstances" or that it would "provide the required resource adequacy during emergency conditions." Rehearing Order P 52 (JA 1476). FERC thereby revealed its application of a standard of proof far more stringent either than it applied to other elements of PJM's Capacity Performance proposal or than Federal Power Act section 205 requires. *See* Pet. Br. 106.[16]

Rather than responding to these arguments, FERC simply restates the grounds for its earlier rejection of PJM's offer and asserts, FERC Br. 64, that "[t]hat judgment was the Commission's to make." FERC's "judgment," however, is not a license to disregard substantial arguments presented to the agency or to the court on review; FERC's failure to engage these clearly presented arguments does not constitute reasoned decision-making. *See Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43; *TransCanada*, 811 F.3d at 12.

[16] Furthermore, the argument that FERC bore no duty to address this element of the PJM Answer because it didn't modify the section 205 filing, Resp't-Int. Br. 44, stands on excessive formalism and disregards FERC's discretion to consider such offers in a filing utility's subsequent submittals.

III. Vacatur Is the Appropriate Remedy

Respondent-Intervenors argue—although FERC does not—that vacatur would be an inappropriate remedy. Resp't-Int. Br. 36-38. Contrary to their assertions, FERC cannot rehabilitate its orders on remand simply by further explanation. For example, FERC approved Capacity Performance in spite of its unjustifiably discriminatory effect on seasonal resources; resolving this error requires changing the adopted tariff. Similarly, FERC was required to consider PJM's filings under Section 206; to remedy this error, FERC must consider alternatives to PJM's proposal, which must be more than a *pro forma* exercise. The severity and nature of FERC's errors weigh in favor of vacatur.

Moreover, vacatur would not be unduly disruptive, as Respondent-Intervenors claim. Vacatur reinstates the rule previously in force. *Envtl. Def. Fund v. Reilly*, 1 F.3d 1254, 1257 (D.C. Cir. 1993). Here, vacatur would reinstate PJM's previously effective capacity-market rules for capacity auctions held while remand is pending. PJM has never claimed that its prior rules were unjust and unreasonable, and it projected that, even without modifying those rules, it had sufficient capacity to meet its reserve margins through 2019. Tariff Order 2 (Bay, dissenting) (JA 1176). Moreover, as Chairman Bay noted, "[b]etter preparation and winterization" had already improved generator performance during the similarly severe winter of 2015, "even in the absence of [C]apacity [P]erformance." *See*

Rehearing Order 2 (Bay, dissenting) (JA 1595). Petitioners do not seek an order that PJM re-run any auctions, issue refunds, or upset existing obligations. *Cf. Black Oak Energy, LLC v. FERC*, 725 F.3d 230, 244 (D.C. Cir. 2013). Vacatur would simply prevent Capacity Performance—which is still in its transitional phase—from going into full effect with the May 2017 auction. Reverting to the prior capacity-market rules while remand is pending would not be unduly disruptive, and it is necessary to prevent the imposition of substantial and unjustified new costs on PJM's customers.

CONCLUSION

The Court should grant the petitions and vacate the Commission's orders.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

In accordance with Fed. R. App. P. 32 and this Court's Order dated September 9, 2016, I certify that this brief has been prepared in a proportionally spaced typeface using Microsoft Word 14-point Times New Roman, and that it contains 9,657 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f).

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