UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.	**)**	**Docket No. EL19-58-___**
	)	**Docket No. ER19-1486-___**

REQUEST FOR REHEARING

Pursuant to Section 313(a) of the Federal Power Act (the "FPA")[1] and Rule 713 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (the "Commission" or "FERC"),[2] The PJM Power Providers Group ("P3")[3] and the Electric Power Supply Association ("EPSA"[4] and together with P3, "Petitioners") respectfully request rehearing of the Commission's December 22, 2021 order on voluntary remand[5] regarding reforms proposed to the rules for PJM's reserve markets set forth in the PJM Open Access Transmission Tariff (the "Tariff") and the Amended and Restated Operating Agreement of PJM (the "Operating

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1 16 U.S.C. § 825*l*(a) (2018).

2 18 C.F.R. § 385.713 (2021).

3 P3 is a non-profit organization dedicated to advancing federal, state and regional policies that promote properly designed and well-functioning electricity markets in the PJM Interconnection, L.L.C. ("PJM") region. Combined, P3 members own over 67,000 MW of generation assets and produce enough power to supply over 50 million homes in the PJM region covering 13 states and the District of Columbia. For more information on P3, visit www.p3powergroup.com. This pleading represents the position of P3 as an organization, but not necessarily the views of any particular member with respect to any issue.

4 EPSA is the national trade association representing competitive power suppliers in the U.S. EPSA members provide reliable and competitively priced electricity from environmentally responsible facilities using a diverse mix of fuels and technologies. EPSA seeks to bring the benefits of competition to all power customers. This pleading represents the position of EPSA as an organization, but not necessarily the views of any particular member with respect to any issue.

5 *PJM Interconnection, L.L.C.*, 177 FERC ¶ 61,209 (2021) (the "December 2021 Order").

Agreement").[6] As detailed herein, rehearing of the December 2021 Order is required because the Commission acted arbitrarily and capriciously and otherwise failed to comply with its obligations under the FPA and the Administrative Procedure Act (the "APA")[7] in reversing its prior orders in these proceedings.[8]

I.

STATEMENT OF ISSUES

In accordance with Rule 713(c)(2) of the Commission's Rules of Practice and Procedure,[9] Petitioners hereby identify each issue on which they seek rehearing of the December 2021 Order, and provide representative precedent in support of their position on each of those issues:

1. The December 2021 Order was arbitrary and capricious and not the product of reasoned decision-making, because the Commission failed to account for the importance of regulatory stability. *Rail Splitter Wind Farm, LLC v. Ameren Servs. Co.*, 142 FERC ¶ 61,047 at P 31 (2013) ("*Rail Splitter*"), *on reh'g*, 146 FERC ¶ 61,017 (2014).

2. The December 2021 Order found that PJM had failed to demonstrate its existing Reserve Penalty Factors to be unjust and unreasonable because PJM did not show that the cost of providing reserves exceeded $850/MWh with "sufficient frequency," December 2021 Order, 177 FERC ¶ 61,209 at P 30, while ignoring prior orders finding price caps to be unjust and unreasonable even though they would only have prevented market prices from reflecting actual costs on rare occasions. The December 2021 is therefore arbitrary and capricious and fails to reflect reasoned decision-

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[6] Capitalized terms used and not otherwise defined herein have the meanings given them in the Tariff or, if not defined therein, in the Operating Agreement or PJM's March 29, 2019 filings in these proceedings, *see* Enhanced Price Formation in Reserve Markets of PJM Interconnection, L.L.C., Docket No. ER19-1486-000 (filed Mar. 29, 2019) (the "Section 205 Filing"); Enhanced Price Formation in Reserve Markets of PJM Interconnection, L.L.C., Docket No. EL19-58-000 (filed Mar. 29, 2019) (the "Section 206 Filing" and together with the Section 205 Filing, the "March 2019 Filings").

[7] 5 U.S.C. §§ 551, *et seq.* (2018).

[8] *See PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,153 (the "May 2020 Order"), *on reh'g*, 173 FERC ¶ 61,123 (2020) (the "November 2020 Rehearing Order" and together with the May 2020 Order, the "Initial Orders"). *See also PJM Interconnection, L.L.C.*, 173 FERC ¶ 61,134 (2020), *on reh'g*, 174 FERC ¶ 61,180 (2021).

[9] 18 C.F.R. § 385.713(c)(2) (2021).

making because the Commission failed to justify its departure from its prior precedent. *See, e.g., FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) ("*Fox*"); *West Deptford Energy, LLC v. FERC*, 766 F.3d 10, 20 (D.C. Cir. 2014) ("*West Deptford*").

3. The December 2021 Order's statement that "there is usually reserve capacity available at a cost much less than $1,000/MWh," December 2021, 177 FERC ¶ 61,209 at P 29, fails to reflect reasoned decision-making, because it fails to explain why this is a relevant factor in a single-clearing price market where clearing prices are set at the price of the marginal resource. *See, e.g., Department of Homeland Security v. Regents of the University of Cal.*, 140 S.Ct. 1891, 1904 (2020) ("*DHS*"); *Michigan v. EPA*, 576 U.S. 743 (2015) ("*Michigan*"); *City of Vernon v. FERC*, 845 F.2d 1042, 1048 (D.C. Cir. 1988) ("*Vernon*").

4. The December 2021 Order is also arbitrary and capricious in illogically claiming that PJM would have had to show that it "actually went economically short of reserves" under the challenged $850/MWh Reserve Penalty Factor, December 2021 Order, 177 FERC ¶ 61,209 at P 34, even though PJM clearly demonstrated that it does procure reserves at higher prices through out-of-market commitments. *See, e.g.*, *Allentown Mack Sales & Serv., Inc. v. NLRB*, 522 U.S. 359, 374 (1998) ("*Allentown*"); *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 105 (1983) ("*Baltimore Gas*").

5. The December 2021 Order is arbitrary and capricious because it completely fails to consider "an important aspect of the problem," *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) ("*State Farm*"), by ignoring PJM's and Petitioners' arguments that, consistent with Commission policy, market prices should be allowed to reflect the marginal resource's costs, including opportunity costs. *See, e.g., PPL Wallingford Energy LLC v. FERC*, 419 F.3d 1194, 1198 (D.C. Cir. 2005) ("*PPL Wallingford*"); *NorAm Gas Transmission Co. v. FERC*, 148 F.3d 1158, 1165 (D.C. Cir. 1998) ("*NorAm*"). In this respect, the Commission also failed to provide a "detailed justification" for why it was ignoring the factual findings with respect to opportunity costs in the Initial Orders. *Fox*, 556 U.S. at 515.

6. Rehearing of the December 2021 Order's findings with respect to level of the Reserve Penalty Factors and the shape of PJM's Operating Reserve Demand Curves ("ORDCs") is required because those findings are not supported by substantial evidence, and improperly ignore contrary evidence, including testimony of eminent economists with decades of experience on electric market design issues. *See, e.g.*, 5 U.S.C. § 706(2)(E) (2018); 16 U.S.C. § 825*l*(b) (2018); *Genuine Parts Co. v. EPA*, 890 F.3d 304, 312 (D.C. Cir. 2018) ("*Genuine Parts*"); *Illinois Commerce Comm'n v. FERC*, 576 F.3d 470, 477 (7th Cir. 2009) ("*ICC*"); *Tenneco Gas v. FERC*,

969 F2d 1187, 1214 (D.C. Cir. 1992) ("*Tenneco*"); *International Union, United Auto., Aerospace & Agric. Implement Workers of Am. v. NLRB*, 802 F.2d 969, 975 (7th Cir. 1986) ("*International Union*").

7. The December 2021 Order failed to reflect reasoned decision-making because the Commission did not provide a meaningful response to arguments and evidence demonstrating that the two-step ORDCs are unjust and unreasonable and also raise serious filed rate doctrine concerns. *See, e.g.*, *PPL Wallingford*, 419 F.3d at 1198; *NorAm*, 148 F.3d at 1165.

8. Although the December 2021 Order claims that $0/MWh reserve prices resulted from inflexible operating parameters, it ignores the fact that PJM's operators indisputably engage in positive biasing and commit resources out-of-market, demonstrating that the need and value of reserves are not reflected in clearing prices. The December 2021 Order is therefore arbitrary and capricious because it fails to consider an "important aspect of the problem . . . ." *State Farm*, 463 U.S. at 43.

9. The December 2021 Order arbitrarily and capriciously ignores contrary Commission precedent finding that steps should be taken to minimize uplift whenever possible and finding vertical demand curves, similar to PJM's existing ORDC, to be unjust and unreasonable, and fails to explain why the Commission has departed from such precedent here. *See*, *e.g.*, *Good Samaritan Medical Ctr. v. NLRB*, 858 F.3d 617, 629 (1st Cir. 2017) ("*Good Samaritan*"); *Williams Gas Processing-Gulf Coast Co., L.P. v. FERC*, 475 F.3d 319, 322 (D.C. Cir. 2006) ("*Williams*").

10. Because PJM indisputably established a *prima facie* case that the Reserve Penalty Factors and the two-step ORDCs were unjust and unreasonable, the Commission could not reject those aspects of the March 2019 Filings without further proceedings. *See, e.g.*, *Petro Star Inc. v. FERC*, 835 F.3d 97, 103 (D.C. Cir. 2016) ("*Petro Star*"); *Tesoro Alaska Petroleum Co. v. FERC*, 234 F.3d 1286, 1293 (D.C. Cir. 2000) ("*Tesoro*").

11. The Commission's failure to respond to serious objections raised by dissenting Commissioner Danly[10] renders its order arbitrary and capricious. *See, e.g.*, *American Gas Ass'n v. FERC*, 593 F.3d 14, 19-21 (D.C. Cir. 2010) ("*AGA*").

12. The Chairman's unilateral directive to the Solicitor's Office to move for voluntary remand was *ultra vires*, because it exceeded the scope of his powers with respect to "executive and administrative operation" matters

[10] *See* Dissenting Statement at P 1, Docket Nos. EL19-58-006, *et al.* (Danly, Comm'r, dissenting) (the "Danly Statement").

and, in any event, was not undertaken "on behalf of" the Commission. 42 U.S.C. § 7171(c) (2018). *See also* Danly Statement at PP 1-4.

II.

BACKGROUND

A. PJM's Proposed Modifications to Its Reserve Market Rules

On March 29, 2019, PJM filed modifications to its reserve markets rules set forth in its Tariff pursuant to Section 205 of the FPA[11] in the Section 205 Filing and identical modifications to the reserve markets rules set forth in its Operating Agreement pursuant to Section 206 of the FPA[12] in the Section 206 Filing.[13] The March 2019 Filings were supported by an affidavit and report prepared by Drs. William W. Hogan and Susan L. Pope, as well as the affidavits of Adam Keech, Christopher Pilong and Patricio Rocha Garrido.[14] These individuals also submitted reply affidavits.[15]

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[11] 16 U.S.C. § 824d (2018).

[12] 16 U.S.C. § 824e (2018).

[13] The proposed modifications to the Tariff, as set forth in the Section 205 Filing, and the proposed modifications to the Operating Agreement, as set forth in the Section 206 Filing, were substantively identical, and, correspondingly, the Section 205 Filing and Section 206 Filing are very similar. For convenience, this filing cites the Section 206 Filing, but substantially similar, if not identical, statements are made in the Section 205 Filing.

[14] *See* Section 206 Filing, Attachment C, Affidavit of Dr. William W. Hogan and Dr. Susan L. Pope on Behalf of PJM Interconnection, L.L.C.; *id.*, Attachment C, Exhibit 1, William W. Hogan and Susan L. Pope, *PJM Reserve Markets: Operating Reserve Demand Curve Enhancements*, (Mar. 22, 2019) (the "Hogan/Pope Report"); *id.*, Attachment D, Affidavit of Adam Keech on Behalf of PJM Interconnection, L.L.C. (the "Keech Affidavit"); *id.*, Attachment E, Affidavit of Christopher Pilong on Behalf of PJM Interconnection, L.L.C. (the "Pilong Affidavit"); *id.*, Attachment F, Affidavit of Dr. Patricio Rocha Garrido on Behalf of PJM Interconnection, L.L.C.

[15] *See* Answer of PJM Interconnection, L.L.C., Docket Nos. EL19-58-000, *et al.* (filed June 21, 2019) (the "PJM Answer"); *id.*, Attachment A, Reply Affidavit of Drs. William W. Hogan and Susan L. Pope on Behalf of PJM Interconnection, L.L.C.; *id.*, Attachment B, Reply Affidavit of Adam Keech on Behalf of PJM Interconnection, L.L.C.; *id.*, Attachment C, Reply Affidavit of Christopher Pilong on Behalf of PJM Interconnection, L.L.C. (the "Pilong Reply Affidavit"); *id.*, Attachment D, Reply Affidavit of Dr. Patricio

The March 2019 Filings explained that reserves are critical in maintaining reliability, and that the reserve markets rules then in effect were no longer just and reasonable. The March 2019 Filings demonstrated that the existing rules were unjust and unreasonable because, among other things, PJM's dispatchers must "regularly bias . . . their scheduling of supply resources in an attempt to manage the uncertainty inherent in near-term forecasts of load, wind generation, and solar generation (or for unexpected plant outages), and taking other out-of-market actions to preserve reliability,"[16] and that the two-step ORDCs "largely do[] not address the uncertainties around load, wind and solar forecasts, and unanticipated plant outages that PJM dispatchers currently attempt to address through scheduling bias or other out-of-market actions."[17] In addition, because of the out-of-market actions taken by PJM's dispatchers, "[c]urrent reserve market clearing prices – zero in about 60 percent of all hours for Synchronized Reserve and in about 98 percent of all hours for Non-Synchronized Reserve – do not reflect the operational value of resource flexibility."[18]

In the March 2019 Filings, PJM proposed a number of changes to the reserve markets rules to address these shortcomings. As relevant here, these changes included modifications to the ORDCs and Reserve Penalty Factors. PJM then used (and unless the December 2021 Order is reversed, will use) two-step ORDCs, which have (1) a step at a Reserve Penalty Factor of

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Rocha Garrido on Behalf of PJM Interconnection, L.L.C. *See also id.*, Attachment E, Mort Webster, *Rewarding Flexibility: An Analysis of the Impact of PJM's Proposed Price Formation Reform on the Incentives for Increasing Generator Flexibility* (June 7, 2019). Petitioners note that these materials are part of the record in these proceedings, because the Commission previously accepted motions for leave to file otherwise impermissible answers, including the PJM Answer. *See* May 2020 Order, 171 FERC ¶ 61,153 at P 19.

16 Section 206 Filing at 6.

17 *Id.* at 7 (footnote omitted).

18 *Id.*

$850/MWh that extends to the minimum reserve requirements ("MRR") quantity for the particular reserve product; and (2) a step at a Reserve Penalty Factor of $300/MWh that extends 190 MW beyond the MRR quantity, and which may be extended beyond 190 MW in certain limited circumstances. PJM explained that "[t]he ORDC's current $850/MWh price ceiling is below the legitimate opportunity cost some PJM Region supply and demand resources could face in shortage or near-shortage conditions, given price levels allowed in the PJM energy market for such resources."[19] PJM therefore proposed to "establish Reserve Penalty Factors of $2,000/MWh to align with the maximum price-setting energy offer cap of $2,000/MWh to better reflect the marginal cost of providing reserves and send appropriate price signals to market sellers . . . ."[20] PJM further proposed to modify the shape of the ORDCs by "establish[ing] a downward-sloping portion to the right of the applicable MRR, using empirical probability formulas, to value reserves in excess of the MRRs."[21]

B. The Commission's Initial Orders

In the May 2020 Order, the Commission found that "PJM ha[d] met its burden under section 206 of the FPA to show that its current reserve market is unjust and unreasonable,"[22] stating:

> PJM presents record evidence that its reserve market is systematically failing to acquire within-market the reserves necessary to operate its system reliably, to yield market prices that reasonably reflect the marginal cost of procuring necessary reserves, and to send appropriate price signals for efficient resource investment. PJM also demonstrates that the reserve products it procures in the day-ahead and real-time markets produce poor

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19 *Id.* at 8.

20 November 2020 Rehearing Order, 173 FERC ¶ 61,123 at P 5.

21 *Id.* at P 86 (footnote omitted).

22 May 2020 Order, 171 FERC ¶ 61,153 at P 74.

> incentives for resource performance and inhibit efficient procurement of the types of reserves needed to address various operational uncertainties.[23]

The Commission further found that "the existing market design is consistently failing to produce prices reflecting the marginal cost of procuring necessary reserves,"[24] in violation of the Commission's longstanding recognition of "the importance of ensuring accurate, transparent market prices when possible."[25]

The Commission largely accepted PJM's proposed modifications to the Tariff and Operating Agreement, subject to certain modifications.[26] It concluded, however, that adoption of these modifications rendered the backward-looking methodology for calculating the energy and ancillary services ("E&AS") offset used in PJM's capacity market unjust and unreasonable and directed PJM to adopt a forward-looking E&AS offset.[27]

In the November 2020 Rehearing Order, the Commission affirmed its earlier holdings, "modifying the discussion in the May 2020 Order and continu[ing] to reach the same result . . . ."[28]

C. The December 2021 Order

Various petitions for review of the Initial Orders were filed in the U.S. Court of Appeals for the District of Columbia Circuit (the "DC Circuit"). On August 13, 2021, the Commission filed a motion for voluntary remand, stating that "[f]urther review of the orders, under the

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23 *Id.*

24 *Id.* at P 83.

25 *Id.*

26 *See id.* at P 2.

27 *See id.* at PP 308-24.

28 November 2020 Rehearing Order, 173 FERC ¶ 61,123 at P 2.

leadership of a new Chairman, has motivated a reconsideration of the Commission's prior determination."[29] The D.C. Circuit granted that motion on August 23, 2021.[30]

In the December 2021 Order, the Commission affirmed, in part, and reversed, in part, the Initial Orders as follows:

> [W]e affirm the Commission's finding that PJM satisfied its burden under section 206 of the [FPA] to show that the bifurcation of Tier 1 and Tier 2 Synchronized Reserve products, misalignment of the day-ahead and real-time reserve markets, and the provisions regarding resources' reserve capability and offer rules are unjust and unreasonable. However, we reverse the Commission's prior determination and find that PJM failed to meet its burden to show that the currently effective Reserve Penalty Factors and two-step [ORDCs] are unjust and unreasonable. We also reverse the Commission's determination that the prior backward-looking [E&AS] offset . . . is unjust and unreasonable, as that determination was based in large part on the findings regarding the Reserve Penalty Factors and ORDCs.[31]

Commissioner Danly dissented to the December 2021 Order. In his dissenting statement issued January 20, 2022, Commissioner Danly expressed concerns about both "the process by which it has come before the Commission" and the fact that the Commission was "arbitrarily changing another fundamental element of PJM's market, over PJM's and litigants' objections, without a full understanding of the consequences."[32]

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[29] Motion of Respondent Federal Energy Regulatory Commission for Voluntary Remand at 2, Nos. 20-1372, *et al.* (D.C. Cir. filed Aug. 13, 2021).

[30] *American Mun. Power, Inc. v. FERC*, Nos. 20-1372, *et al.* (D.C. Cir. Aug. 23, 2021).

[31] December 2021 Order, 177 FERC ¶ 61,209 at P 2 (footnote omitted).

[32] Danly Statement at P 1.

III.

REQUEST FOR REHEARING

Rehearing of the December 2021 Order is required because the Commission failed to engage in reasoned decision-making, in violation of its obligations under the FPA and the APA. Before turning to the specific legal defects in the December 2021 Order, however, Petitioners wish to express their profound concern that the Commission is now gutting a broadly supported and badly needed package of reforms to PJM's reserve markets that it approved almost a year and a half ago and that it appears to be doing so without giving any consideration of the importance of regulatory stability. The Commission has long "emphasized that it considers stability and regulatory certainty an important issue in its decision-making process,"[33] and has stated that it will "strive[] to provide regulatory certainty through consistent approaches and actions."[34] Now-Chairman Glick put it well in discussing the importance of regulatory stability in the context of return on equity ("ROE") for transmission providers, explaining:

> All approaches to setting ROEs have their shortcomings, but the worst outcome by far is to continually fiddle with those approaches, undermining the certainty and predictability that help transmission owners make long-term investments . . . . Otherwise, we're going to end up promoting full employment for energy lawyers rather than a stable investment climate for transmission owners.[35]

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[33] *Rail Splitter*, 142 FERC ¶ 61,047 at P 31. *See also Nevada Power Co. v. Duke Energy Trading & Mktg., L.L.C.*, 99 FERC ¶ 61,047 at 61,190 ("Competitive power markets simply cannot attract the capital needed to build adequate generating infrastructure without regulatory certainty . . . ."), *on reh'g*, 100 FERC ¶ 61,273 (2002).

[34] FERC, *About FERC*, https://ferc.gov/what-ferc.

[35] *Association of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, 173 FERC ¶ 61,159, Concurring and Dissenting Statement at P 10 (2020) (Glick, Comm'r, dissenting, in part, and concurring, in part) (the "*ABATE* Statement")

The same is true of market rules, and regulatory stability is, if anything, even more critical in the market rules context, where fulfilment of the Commission's statutory mission "to encourage the orderly development of plentiful supplies of electricity . . . at reasonable prices"[36] depends on voluntary, private investment of billions of dollars in the supply resources that are needed keep the lights on being made in reliance on Commission-regulated market structures.[37]

Regrettably, the December 2021 Order evinces no concern whatsoever about regulatory stability, even as the Commission engages in something considerably more disruptive than "fiddl[ing]."[38] Rather, this order is yet another in a series of "do-overs," through which the current Commission seeks to un-do the work of prior Commissions with little or no consideration of the destabilizing effect of doing so. And, as Commissioner Danly suggests, the means by which the Commission has undertaken this "do-over" – voluntary remand rather than a new FPA Section 206 proceeding – exacerbates the de-stabilizing effect.[39] Such a regulatory approach does a disservice to regulated entities and, even assuming the current Commission's policy is superior to that of the prior Commission, to the public.[40] Indeed, as Chairman Glick observed in the ROE context, these actions are "going to end up promoting full employment for energy lawyers rather than a stable investment climate . . . ."[41]

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36 *National Ass'n for the Advancement of Colored People v. FPC*, 425 U.S. 662, 670 (1976) (footnote omitted).

37 *See, e.g., Independent Market Monitor for PJM v. PJM Interconnection, L.L.C.*, 178 FERC ¶ 61,022, Concurring Statement at P 1 (2022) (Danly, Comm'r, concurring) (the "Danly EL19-47 Statement") ("Power markets simply cannot function when the rules constantly change, and for that, the blame lies squarely with the Commission.").

38 *ABATE* Statement at P 10.

39 *See* Danly Statement at PP 5-6.

40 *See* Danly EL19-47 Statement at P 4 ("Greater risk means greater costs, means more expensive power, means higher rates.").

41 *ABATE* Statement at P 10.

The Commission likewise undermines regulatory stability and does a disservice to regulated entities and the public when it fails to engage in reasoned decision-making and to take actions supported by substantial evidence. As discussed below, however, that is precisely what the Commission did in the December 2021 Order, as it ignored and mischaracterized the arguments and evidence before it and otherwise failed to meet the requirements of the FPA and the APA. Nobody is saying that the issues presented in these proceedings were simple. But, as the courts have made clear, "FERC's complex mandate doesn't relieve it of the requirements of reasoned decisionmaking."[42] And it also bears emphasis that the remand from the D.C. Circuit in this instance was ***voluntary***. The Commission (or at least the Chairman[43]) chose to have the Commission re-engage in this case, and some thought should have been given to the fact that the existing record did not support the desired outcome before doing so.

A. The Commission's Reinstatement of Unjust and Unreasonable Reserve Penalty Factors Was Arbitrary and Capricious and Not Supported by Substantial Evidence

In the March 2019 Filings, PJM explained that "[t]he ORDC's current $850/MWh price ceiling is below the legitimate opportunity cost some PJM Region supply and demand resources could face in shortage or near-shortage conditions, given price levels allowed in the PJM energy market for such resources."[44] PJM proposed, therefore, to increase the Reserve Penalty Factors to $2,000/MWh, stating that, absent such change, "system operators will be required to continue procuring reserves in the future at costs above $850/MWh outside the market, creating a distortion in the market that results in uplift."[45] The Commission agreed, finding the $850/MWh Reserve

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42 *New England Power Generators Ass'n, Inc. v. FERC*, 881 F.3d 202, 212.

43 *See* Danly Statement at PP 1-4 & nn.2, 9.

44 Section 206 Filing at 8.

45 *Id.* at 33.

Penalty Factor to be unjust and unreasonable "because it is below the legitimate opportunity cost some resources could face in shortage or near-shortage conditions, as a result of the $2,000/MWh energy offer price cap now in effect."[46]

By contrast, the December 2021 Order now finds that "there is insufficient evidence to find PJM's Reserve Penalty Factors unjust and unreasonable . . . ."[47] The rationales put forward in the December 2021 Order to attempt to justify this about-face are unavailing, fail to reflect reasoned decision-making, and are not supported by substantial evidence. First, the Commission falsely assumes that PJM was required to demonstrate that the marginal cost of providing reserves, including opportunity costs, exceed the existing $850/MWh Reserve Penalty Factor with "sufficient frequency" to satisfy PJM's burden under Section 206 of the FPA.[48] The December 2021 Order fails to provide any basis for such a "frequency" threshold or to reconcile this newly minted requirement with its prior holdings. In the November 2020 Rehearing Order, the Commission expressly rejected the proposition that any such requirement exists, stating that it "did not accept the $2,000/MWh Reserve Penalty Factors on the basis of past frequency of a resource's opportunity costs reaching $2,000/MWh," and emphasizing that "[t]he market price needs to capture these opportunity costs, ***even if relatively rare*** . . . ."[49]

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46 November 2020 Rehearing Order, 173 FERC ¶ 61,123 at P 16.

47 December 2021 Order, 177 FERC ¶ 61,209 at P 28.

48 *Id.* at P 30. *See also id.* at P 29 (stating that "there is usually reserve capacity available at a cost much less than $1,000/MWh"); *id.* at P 30 ("PJM does not provide support for concluding that its hypothetical situation has or is likely to occur with sufficient frequency"); *id.* at P 32 ("PJM failed to provide a factual record demonstrating that PJM operators routinely incur costs greater than $850/MWh"); *id.* at P 35 (claiming that data provided by PJM "overstates the degree of the problem because it fails to take into account the number of pricing intervals in which the offers exceeded $1,000").

49 November 2020 Rehearing Order, 173 FERC ¶ 61,123 at P 81 (emphasis added).

The Commission's prior rejection of any "frequency" threshold of the sort applied in the December 2021 Order was in perfect accord with its precedent. For example, the Commission previously found the $1,000/MWh offer caps imposed by some regional transmission organizations ("RTOs") and independent system operators ("ISO"), like PJM, to be unjust and unreasonable because they "may suppress [Locational Marginal Prices ("LMPs")] below the marginal cost of production . . . ."[50] Notably, in requiring RTOs and ISOs to raise their offer caps, the Commission further stated:

> We have essentially two choices to enable resources to recover short-run marginal costs above $1,000/MWh: to allow cost recovery through energy prices or through uplift. Short-run marginal costs, which resources include in the incremental energy component of their supply offers, are typically used to calculate LMP . . . . [E]nsuring that LMPs reflect the marginal cost of production sends critical information to market participants, improves transparency, and generally results in more efficient outcomes in RTO/ISO energy markets. We find that recovery through energy prices, in most circumstances, will provide the additional benefit that LMPs reflect the marginal cost of production, will increase transparency about the functioning of RTO/ISO energy markets, and will facilitate efficient dispatch of resources with short-run marginal costs above $1,000/MWh. ***While we recognize that offer caps may not bind frequently, the [FPA] requires the Commission to ensure that rates are just and reasonable.***[51]

Similarly, in an earlier order addressing PJM prices during shortages, the Commission found that reforms were required, because:

> PJM has identified ***seven events occurring during 28 hours over the previous five years*** when reserve shortage conditions have been experienced within the PJM region. During these shortage events, synchronized reserve market clearing prices were consistently low, sometimes as low as $0 per MWh, while energy prices ranged

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[50] *Offer Caps in Mkts. Operated by Regional Transmission Orgs. & Indep. Sys. Operators*, Order No. 831, 157 FERC ¶ 61,115 at P 34 (2016) ("Order No. 831), *on reh'g*, Order No. 831-A, 161 FERC ¶ 61,156 (2017).

[51] *Id.* at P 36 (emphasis added) (footnotes omitted).

> between $300 per MWh to just over $1,000 per MWh. However, during most of these shortage events, there were sizable out-of-market, resource-specific opportunity cost payments made to resources that were held back from energy production to provide reserves, including payments as high as $923 per MWh during the August 8, 2007 event.[52]

On a percentage basis, seven events during 28 hours over five years is hardly frequent, but the Commission nonetheless properly recognized the importance of ensuring that market prices reflected these costs, even in these relatively rare events.

It is axiomatic that an agency may not "depart from a prior policy *sub silentio* . . . ."[53] But in this case, the December 2021 Order does not even acknowledge its precedent finding price caps to be unjust and unreasonable because of circumstances that were acknowledged to occur only infrequently. Nor does it explain how, given that precedent, the Commission could legitimately insist that PJM show that the costs of the marginal resource would exceed $850/MWh with "sufficient frequency"[54] or "routinely"[55] in order to satisfy its burden under Section 206 of the FPA.[56]

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[52] *PJM Interconnection, L.L.C.*, 139 FERC ¶ 61,057 at P 63 (the "April 2012 Order") (emphasis added), *on reh'g*, 141 FERC ¶ 61,096 (2012).

[53] *Fox*, 556 U.S. at 515.

[54] December 2021 Order, 177 FERC ¶ 61,209 at P 30.

[55] *Id.* at P 32.

[56] *See, e.g.*, *Fox*, 556 U.S. at 515 (stating that an agency departing from its own precedent must "display awareness that it is changing position" and "show that there are good reasons for the new policy"); *West Deptford*, 766 F.3d at 20 ("It is textbook administrative law that an agency must 'provide[] a reasoned explanation for departing from precedent or treating similar situations differently,' . . . and Commission cases are no exception . . . ." (citation omitted)); *Panhandle E. Pipe Line Co. v. FERC*, 196 F.3d 1273, 1275 (D.C. Cir. 1999) ("As we have repeatedly reminded FERC, if it wishes to depart from its prior policies, it must explain the reasons for its departure." (citations omitted)).

Second, the December 2021 Order breezily claims that "there is usually reserve capacity available at a cost much less than $1,000/MWh."[57] The Commission never explains why this is supposed to be dispositive. PJM's reserve markets are single-clearing price markets in which the clearing price is set at the price of the marginal resource's offer.[58] That there will be supply available at a cost below that of the marginal offer follows inevitably from such a structure. As a result, the fact that there may be lower cost supply available is no more relevant than the fact there was likely higher cost supply available, and the Commission thus fails to demonstrate that its decision was "based on a consideration of the relevant factors . . . ."[59]

Finally, the December 2021 Order errs in its treatment of the data provided by PJM showing that "'lost opportunity costs, which constitute the bulk of offers used in forming the Synchronized Reserve supply stack, exceeded $1,000/MWh on 3.6% of the days (70 of 1,947

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[57] December 2021 Order, 177 FERC ¶ 61,209 at P 29.

[58] *See, e.g., Remedying Undue Discrimination through Open Access Transmission Serv. & Standard Elec. Mkt. Design*, 100 FERC ¶ 61,138 at P 204 (2002) (explaining that "[m]arginal pricing is the idea that the market price should be the cost of bringing the last unit to market (the one that balances supply and demand)"); *id.* at n.118 ("Under LMP, all suppliers selling at a location receive the market clearing price, including those who offer in their bids to sell for less."); *Commonwealth Edison Co.*, 113 FERC ¶ 61,278 at P 43 (2005) (addressing concern that "under the proposed [auction] all winning bidders would be paid a uniform price regardless of their actual cost of supplying electricity and that the clearing price would be set by the highest-cost winning bidder in the auction," and explaining that "this pricing methodology is known as the 'single clearing price' method and has the benefit of encouraging all sellers to place bids that reflect their actual marginal opportunity costs"), *on reh'g*, 115 FERC ¶ 61,133 (2006).

[59] *DHS*, 140 S.Ct. at 1905 (citation omitted). *See also, e.g., Michigan*, 576 U.S. at 750 ("agency action is lawful only if it rests 'on a consideration of the relevant factors'" (citation omitted)); *State Farm*, 463 U.S. at 43 (holding that an "agency 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'); *Dana Container, Inc. v. Secretary of Labor*, 847 F.3d 495, 499 (7th Cir. 2017) (in order for its decision to be upheld, an agency must have "considered relevant data under the correct legal standards"); *Vernon*, 845 F.2d at 1048 (explaining that "an agency is not entitled under the APA to respond with a non sequitur" (citations omitted)); *Tennessee Gas Pipeline Co. v. FERC*, 824 F.2d 78, 84 (D.C. Cir. 1987) (finding decision to be arbitrary and capricious where the Commission's finding was a "complete *non sequitur*").

days).'"[60] The Commission claims that such data "say nothing about how often those resources with lost opportunity cost offers that exceeded $850/MWh would have been selected to provide Synchronized Reserve . . . (i.e., how often PJM actually went economically short of reserves at a $850/MWh Reserve Penalty Factor when it would have been able to procure sufficient reserves if the Reserve Penalty Factor were $2,000/MWh)."[61] The suggestion that PJM would have to show that it was unable to "procure sufficient reserves" is plainly illogical and fails to reflect consideration of relevant factors,[62] given that the March 2019 Filings demonstrated that PJM's operators can and do procure reserves at prices above $850/MWh, but compensate suppliers for those costs through uplift.[63]

In addition, the December 2021 Order claims that the data provided by PJM "overstates the degree of the problem" because PJM did not provide data for each pricing interval.[64] The December 2021 Order does not provide any evidence rebutting the data provided by PJM.[65] More fundamentally, as discussed above, this critique falsely assumes a "frequency" threshold. Because there is no such threshold, the Commission's assertion that the data "overstate the degree of the problem,"[66] even if true, is irrelevant. The fact remains that there is a problem and that problem

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60 December 2021 Order, 177 FERC ¶ 61,209 at P 33 (quoting PJM Answer at 51).

61 *Id.* at P 34.

62 *See, e.g., Allentown*, 522 U.S. at 374 (the process by which an agency arrives at a particular "result must be logical and rational"); *Baltimore Gas*, 462 U.S. at 105 (agency must "consider[] the relevant factors and articulate[] a rational connection between the facts found and the choice made" (citations omitted)).

63 *See* Section 206 Filing at 33. *See also* May 2020 Order, 171 FERC ¶ 61,153 at P 34 ("PJM explains that its operators will dispatch resources with opportunity costs greater than $850/MWh to provide reserves, but those resources' costs will not be reflected in market prices and will instead be covered through uplift.").

64 December 2021 Order, 177 FERC ¶ 61,209 at P 35.

65 *See* 5 U.S.C. § 706(2)(E) (2018) (providing agency decisions shall be held unlawful if they are "unsupported by substantial evidence"); 16 U.S.C. § 825*l*(b) (2018) (providing that Commission findings of fact will be conclusive "if supported by substantial evidence").

66 December 2021 Order, 177 FERC ¶ 61,209 at P 35.

renders the Reserve Penalty Factors reinstated by the December 2021 Order unjust and unreasonable and thus unlawful under Section 206 of the FPA.[67]

At the end of the day, the Commission, in the December 2021 Order, appeared more interested in grappling with strawmen of its own invention than with serious arguments and substantial evidence regarding the unlawfulness of the Reserve Penalty Factors challenged in PJM's March 2019 Filings. Critically, the Commission does not and cannot dispute that PJM now has a $2,000/MWh energy offer price cap. Similarly, it does not and cannot deny that the energy price represents the opportunity cost a resource would incur for providing reserves and that the Commission has long recognized that marginal costs include opportunity costs.[68] Moreover, and as the PJM Answer pointed out, "no party refutes that the penalty factor should be based on the opportunity cost of providing reserves instead of energy."[69] It follows inexorably from these undisputed and indisputable facts that, as PJM correctly stated, "[t]he fact is that resources ***can*** face an opportunity cost well above $1,000/MWh, up to $2,000/MWh or higher," and that while

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67 16 U.S.C. § 824e (2018).

68 *See, e.g.,* Order No. 831-A, 161 FERC ¶ 61,156 at P 38 (stating that "opportunity costs are legitimate short-run marginal costs that should be considered part of a cost-based incremental energy offer"); *PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,157 at P 185 (2017) (stating that "an appropriate competitive offer includes all of the marginal and opportunity costs a resource faces to participate in the capacity market"), *on reh'g*, 162 FERC ¶ 61,047 (2018); *Frequency Regulation Compensation in the Organized Wholesale Power Mkts.*, Order No. 755, 137 FERC ¶ 61,064 at P 99 (2011) ("Paying to all cleared frequency regulation resources a uniform price that includes opportunity costs will ensure that all appropriate costs are considered and will send an efficient price signal to current and potential market participants."), *on reh'g*, Order No. 755-A, 138 FERC ¶ 61,123 (2012); *id.* at P 102 ("Regarding cross-product opportunity costs, which reflect the foregone opportunity to participate in the energy or ancillary services markets, the Commission finds that it is appropriate for the RTOs and ISOs to calculate this and include it in each resource's offer to supply frequency regulation capacity, for use when determining the market clearing price and which resources clear.").

69 PJM Answer at 32. *See also* December 2021 Order, 177 FERC ¶ 61,209 at P 29 (acknowledging that "[t]he costs of a resource providing reserves are mainly based on that resource's lost opportunity costs: the difference between the prevailing locational marginal price (LMP) and its energy offer, i.e., its foregone net energy market revenues").

"'this scenario is not likely . . . it can happen and system operators are required to take actions in this price range to maintain reserves.'"[70] Similarly, Petitioners and their expert witnesses demonstrated that it is consistent with Commission policy and economic theory to have market prices reflect opportunity costs.[71] The December 2021 Order, however, completely ignored these arguments and "entirely fail[ed] to consider an important aspect of the problem"[72] by providing ***no*** explanation as to why clearing prices should not be allowed to reflect actual marginal costs, including opportunity costs.

In ignoring the expert testimony submitted by PJM, Petitioners and others on this issue, the Commission also failed to satisfy the FPA and APA requirements to support its decisions with substantial evidence.[73] As the D.C. Circuit recently admonished: "What this record required was nothing more and nothing less than a reasoned assessment of the evidence as a whole."[74] Yet, the December 2021 Order reflects no such assessment and instead rests on a "clipped view of the record" that ignores evidence that would support a different outcome.[75] Or, as Commissioner

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70 PJM Answer at 50 (emphasis in original) (citation omitted).

71 *See, e.g.*, Comments of the PJM Power Providers Group at 9-10, Docket Nos. EL19-58-000, *et al.* (filed May 16, 2019) (the "P3 Comments"); *id.*, Attachment B, Emma Nicholson, Ph.D. Whitepaper on RTO/ISO Market Design Changes to Increase Operational Flexibility at 13, 16; Supporting Comments of the Electric Power Supply Association at 16-17, Docket Nos. EL19-58-000, *et al.* (filed May 15, 2019) (the "EPSA Comments"); *id.*, Attachment A, Affidavit of Paul M. Sotkiewicz, Ph.D., ¶ 8 ("Sotkiewicz Affidavit").

72 *State Farm*, 463 U.S. at 43. *See also, e.g.*, *PPL Wallingford*, 419 F.3d at 1198 (requiring the Commission to "respond meaningfully" to concerns raised by parties); *NorAm*, 148 F.3d at 1165 (reversing order in which the Commission "not only failed to provide an adequate response to [petitioner's] argument, it failed to take seriously its responsibility to respond at all"); *K N Energy, Inc. v. FERC*, 968 F.2d 1295, 1303 (D.C. Cir. 1992) (stating that an agency must "engage the arguments raised before it – that it conduct a process of *reasoned* decisionmaking" (emphasis in original)).

73 *See* 5 U.S.C. § 706(2)(E) (2018); 16 U.S.C. § 825*l*(b) (2018).

74 *Public Citizen, Inc. v. FERC*, 7 F.4th 1177, 1200 (D.C. Cir. 2021).

75 *Genuine Parts*, 890 F.3d at 312. *See also, e.g.*, *Tenneco*, 969 F2d at 1214 (finding that "a FERC order neglectful of pertinent facts on the record must crumble for want of substantial evidence").

Danly put it, the order "simply looks past the detailed evidence presented by PJM that . . . [the] Reserve Penalty Factor of $850/MWh was below the legitimate opportunity cost some resources could face in shortage or near-shortage conditions."[76]

Similarly, the Commission completely fails to grapple with its own prior findings concerning PJM's proposed $2,000/MWh Reserve Penalty Factors, including its findings that "no party contested that resources could face a legitimate opportunity cost this high in either the original proceeding or on rehearing," and that "[u]sing the $2,000/MWh price for all reserve products is just and reasonable because it will capture these opportunity costs."[77] The December 2021 Order thus neglects the Commission's obligation to "provide a more detailed justification" when it is relying "upon factual findings that contradict those which underlay its prior policy . . . ."[78]

B. The Commission's Reinstatement of Unjust and Unreasonable Vertical ORDCs Was Arbitrary and Capricious and Not Supported by Substantial Evidence

In the March 2019 Filings, PJM explained that, to maintain reliability, its operators frequently bias the Intermediate Term ("IT") Security Constrained Economic Dispatch ("SCED") cases, thereby "signaling to the dispatch software that they require more supply (energy) to be on the system than the other input data (load forecast, renewable forecast, net interchange, etc.) would

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[76] Danly Statement at P 12.

[77] November 2020 Rehearing Order, 173 FERC ¶ 61,123 at P 81 (footnote omitted).

[78] *Fox*, 556 U.S. at 515. *See also, e.g., id.* at 537 ("An agency cannot simply disregard contrary or inconvenient factual determinations that it made in the past, any more than it can ignore inconvenient facts when it writes on a blank slate.") (Kennedy, J., concurring)); *Air Alliance Houston v. EPA*, 906 F.3d 1049, 1068 (D.C. Cir. 2018) (finding that agency had acted arbitrarily and capriciously where it "failed to rationally explain its departure from its previous conclusions"); *Central & S. W. Servs., Inc. v. EPA*, 220 F.3d 683, 687 (2000) (stating that, "when [an agency] seeks to change its regulatory course, it bears the burden of producing evidence in the record supporting the change in its rules").

otherwise indicate."[79] In addition, PJM operators will also commit resources out-of-market, which may be necessary in "conditions the IT SCED bias is not directly able to account for, such as the need for longer lead generation that must be committed prior to the IT SCED two-hour window or if there is a locational need for the reserves due to major transmission constraints."[80] The two-step ORDCs, however, "take the general shape of a vertical curve with step functions,"[81] and therefore "prohibit PJM from explicitly scheduling the flexibility that is needed to accommodate legitimate forecasting uncertainties beyond the requirement expressed in Step 2A of the demand curve."[82] PJM further stated that the extra reserves procured through operator biasing and out-of-market commitments "are not properly priced in real-time because the market does not reflect the true demand for reserves. This leads to uplift and price suppression and needs to be corrected."[83]

The May 2020 Order agreed that these flaws rendered PJM's reserve market rules unjust and unreasonable.[84] With respect to the existing ORDCs, the May 2020 Order stated: "We agree with PJM that its existing ORDCs, and the various reserve requirements on which they are based, fail to reflect the universe and magnitude of the operational uncertainties with which PJM operators must contend."[85] Among other things, "the fact that PJM operators regularly need to

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79 Keech Affidavit, ¶ 50. *See also* Pilong Affidavit, ¶¶ 8-17.

80 Pilong Affidavit, ¶ 18. *See also id.* at ¶¶ 19-20.

81 Section 206 Filing at 23.

82 *Id.* at 36.

83 Pilong Affidavit, ¶ 11.

84 *See* May 2020 Order, 171 FERC ¶ 61,153 at P 74 ("We find that PJM has met its burden under section 206 of the FPA to show that its current reserve market is unjust and unreasonable. PJM presents record evidence that its reserve market is systematically failing to acquire within-market the reserves necessary to operate its system reliably, to yield market prices that reasonably reflect the marginal cost of procuring necessary reserves, and to send appropriate price signals for efficient resource investment.").

85 *Id.* at P 76.

procure thousands of additional MW of reserves—quantities upward of 50-100% of the MRRs—is evidence of a market design that is unjust and unreasonable,"[86] and "[t]he evidence shows that PJM's operators will, and do, acquire needed additional reserves at costs in excess of what the current reserve market design allows to be reflected in price."[87]

As noted above, the Supreme Court in *Fox* established that an agency has a higher burden when it is reversing prior factual findings.[88] Nonetheless, the Commission now tosses aside its prior findings regarding the shape of the ORDCs with little justification and even less supporting evidence. As an initial matter, the Commission blithely dismisses the findings in the Initial Orders as having "relied on broad statements regarding the amount of operational uncertainty PJM faces, PJM operators' practice of load forecast biasing and the prevalence of reserve market uplift . . . ."[89] This statement, in and of itself, evidences a clear failure on the Commission's part to take seriously its obligations under the APA and its willingness to mischaracterize the record.[90] Nowhere in the December 2021 Order does the Commission mention, much less grapple with, the mountain of evidence submitted by PJM, Petitioners and others demonstrating that the two-step ORDCs are unjust and unreasonable.[91] Instead, as Commissioner Danly observed, the Commission "simply

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86 *Id.* at P 80.

87 *Id.* at P 81 (footnote omitted).

88 *See Fox*, 556 U.S. at 515-516.

89 December 2021 Order, 177 FERC ¶ 61,209 at P 36.

90 This type of "conclusory and unexplained statement is not the 'reasoned' explanation required by the APA." *Environmental Health Trust v. FCC*, 9 F.4th 893, 909 (D.C. Cir. 2021).

91 *See* footnotes 14 & 15 above (describing the affidavits and reports submitted by PJM). *See also* P3 Comments, Attachment A, Affidavit of A. Joseph Cavicchi; Nicholson Affidavit; Sotkiewicz Affidavit; Comments of Exelon Corporation, Affidavit of Michael M. Schnitzer, Docket Nos. EL19-58-000, *et al.* (filed May 16, 2019).

looks past th[is] detailed evidence . . . ."[92] It is well established that the Commission may not take an "ostrich's approach," where it "confine[s] its attention to evidence that support[s] its conclusion and . . . ignore[s] any contrary evidence."[93] And yet, that is precisely what the Commission did in the December 2021 Order, ignoring all evidence that does not support its desired conclusion and relying almost exclusively on contrary arguments of the IMM.[94] The Commission therefore failed to demonstrate that the December 2021 Order is supported by substantial evidence,[95] as "[t]he substantiality of evidence must take into account whatever in the record fairly detracts from its weight,"[96] and "evidence that is substantial viewed in isolation may become insubstantial when contradictory evidence is taken into account."[97]

The December 2021 Order attempts to discredit PJM's claims regarding operating biasing by stating that "PJM's analysis of operator bias unreasonably focuses solely on positive forecast bias and does not systematically analyze operator bias overall,"[98] and further asserting that "PJM

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92 Danly Statement at P 12.

93 *International Union*, 802 F.2d at 975. *See also Genuine Parts*, 890 F.3d at 312 (making clear that "an agency cannot ignore evidence that undercuts its judgment . . . [or] minimize such evidence without adequate explanation"); *Tenneco*, 969 F2d at 1214 (finding that "a FERC order neglectful of pertinent facts on the record must crumble for want of substantial evidence"); *Lakeland Bus Lines, Inc. v. NLRB*, 347 F.3d 955, 963 (D.C. Cir. 2003) (holding that the agency may not rely on a "clipped view of the record" to support its conclusion); *Green v. Shalala*, 51 F.3d 96, 102 (7th Cir. 1995) (holding that where the agency "did not grapple with significant record evidence in [its] decision," that decision "is not supported by substantial evidence" (citation omitted)); *Schurz Commc'ns, Inc. v. FCC*, 982 F.2d 1043, 1050 (7th Cir. 1992) (finding decision to be arbitrary and capricious where the agency "ostrich fashion, did not discuss the most substantial objections to its approach, though the objections were argued vigorously to it").

94 *See* December 2021 Order, 177 FERC ¶ 61,209 at PP 36-44 & nn.75-100.

95 *See* 5 U.S.C. § 706(2)(E) (2018) (requiring reviewing courts to set aside agency actions "unsupported by substantial evidence").

96 *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 488 (1951).

97 *Landry v. Fed. Deposit Ins. Corp.*, 204 F.3d 1125, 1140 (D.C. Cir. 2000). *See also, e.g.*, *ICC*, 576 F.3d at 477 (explaining that a reviewing court cannot "uphold a regulatory decision that is not supported by substantial evidence on the record as a whole").

98 December 2021 Order, 177 FERC ¶ 61,209 at P 38 (footnote omitted).

has failed to demonstrate the actual impacts that IT SCED bias has on PJM's market or its reserve levels."[99] Again, the Commission is beating up on a strawman. As indicated in the Pilong Reply Affidavit, instances of negative bias do "not impact the analysis that PJM provided."[100] Specifically, Mr. Pilong explained:

> PJM's analysis looked exclusively at the intervals where the bias was positive (as a percentage of the total number of intervals), and demonstrated that if the positive biases were removed in those cases, PJM could have been short reserves. The fact that negative biases existed in other cases does not change this statistic in any way. Moreover, the purposes of negative biasing and positive biasing are different. Specifically, when load is going out, PJM needs to begin taking resources offline. To prepare for this, the Dispatcher will negatively bias the case to see what units are on the threshold of being recommended to be released (taken off-line), which allows the Dispatcher time to study and then eventually begin taking those units off as the actual system load reduces. While the practice of biasing the IT SCED case is similar on the surface, the actual purpose when compared to positive biasing during periods of increasing system load is fundamentally different. That is because the purpose of positive biasing is to maintain reserves and reliability during periods of increasing load (managing risk), and the purpose of negative biasing is to remove generation that is not economically needed after PJM has past the peak load for the period (managing uplift).[101]

Here again, the Commission's December 2021 Order takes an "ostrich's approach,"[102] as it completely fails to acknowledge, much less offer a cogent response to, Mr. Pilong's explanation.[103]

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99 *Id.* at P 39.

100 Pilong Reply Affidavit, ¶ 14.

101 *Id.*

102 *International Union*, 802 F.2d at 975.

103 *See, e.g.*, *PPL Wallingford*, 419 F.3d at 1198; *NorAm*, 148 F.3d at 1165.

The December 2021 Order also suggests that uplift resulting from operator biasing was less of an issue than PJM had claimed.[104] Even assuming *arguendo* that the December 2021 Order is correct that there is less uplift than PJM calculated, the Commission is missing the point. Uplift, as such, is not the fundamental problem; instead, the fundamental problem is the need for operator biasing that produces the uplift. This was amply demonstrated in the March 2019 Filings, including, for example, in the Hogan/Pope Report, which explained that the existing ORDCs fail to "recognize the true value of reserves along a continuum derived from the probabilistic representation of the expected need for additional reserves in real-time," and "leave[] market participants exposed to the impact of out of market decisions which undermines confidence by PJM market participants that the prices in the markets will be the result of competitive market forces."[105] Similarly, the Sotkiewicz Affidavit observed that the construct then (and now) in place "makes it practically impossible for price formation to be consistent with reliability needs as operators are taking actions that do not transparently appear to all market participants."[106] PJM also pointed out that, because of the flawed ORDCs, resources are committed out-of-market on a "pay-as-bid" basis, which "unreasonably undervalues reserves and sends a weak, muted, signal of the value of flexibility on the PJM system."[107] The December 2021 Order, however, arbitrarily and capriciously fails to address these arguments.[108]

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104 *See* December 2021 Order, 177 FERC ¶ 61,209 at PP 40, 42.

105 Hogan/Pope Report at 4.

106 Sotkiewicz Affidavit, ¶ 22.

107 Section 206 Filing at 49. *See also id.* at 49-50 (discussing Commission precedent recognizing benefits of single clearing price markets over pay-as-bid models); EPSA Comments at 8-9 (raising concerns that the flawed market design results in a "pay-as-bid" pricing scheme).

108 *See, e.g.*, *PPL Wallingford*, 419 F.3d at 1198; *NorAm*, 148 F.3d at 1165.

In the same vein, the Commission simply ignored EPSA's point that systematic reliance on operator biasing is "not only troubling from a market design perspective but also raises serious filed rate doctrine concerns and conflicts with the spirit, if not the letter, of Section 205(c) of the FPA."[109] To the contrary, the December 2021 Order acknowledges that "PJM's currently effective ORDCs consist exclusively of discrete steps associated with discrete reserve requirements and do not procure any reserves beyond those minimum requirements,"[110] but makes no effort to explain how the operator biasing that has become necessary for PJM to maintain reliability is consistent with the limitations on additional procurement under the filed rate.

The December 2021 Order's exclusive reliance on the IMM's claims regarding $0/MWh reserve prices due to inflexible operating parameters[111] is irreconcilable with the fact that PJM's operators are still engaged in positive biasing that reveals a need for, value of, reserves not reflected in the clearing prices. To be sure, if the market were internalizing the costs of operating reserves, one could reasonably infer that "the cost of providing them is free or close to it."[112] But as PJM demonstrated and as the Commission correctly held in the Initial Orders: "PJM operators' frequent need to intervene in reserve market outcomes indicates that the market is not functioning properly, and because those operator actions are not fully incorporated into market prices, those prices do not reflect the true marginal cost of providing necessary reserves."[113] The December 2021 Order

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109 EPSA Comments at 9.

110 December 2021 Order, 177 FERC ¶ 61,209 at P 37.

111 *See id.* at P 41.

112 *Id.*

113 May 2020 Order, 171 FERC ¶ 61,153 at P 91. *See also* November 2020 Rehearing Order, 173 FERC ¶ 61,123 at P 41 (finding that, notwithstanding the IMM's contentions regarding the effect of inflexible operating parameters on reserve prices, "PJM has established the need to bias the software to account for faster-than-expected load, lower-than-expected generation, and generators that are slow to ramp-up" (footnote omitted)).

therefore fails to reflect reasoned decision-making because it ignores "an important aspect of the problem . . . ."[114]

In addition, contrary to the Commission's obligations under the APA, the December 2021 Order also ignores relevant precedent and fails to adequately justify deviations from such precedent. Again choosing to wrestle with a strawman rather than with the case before it, the Commission stated that it has not "establish[ed] an across-the-board policy that market rules will be deemed unjust and unreasonable if they permit uplift."[115] It is true enough that "[s]ince the limitations in representing the complexity of the electric system in market models are unlikely to ever be fully resolved, uplift costs are also unlikely to be completely eliminated."[116] It does not follow, however, that the Commission can simply ignore the existence of uplift and the underlying market design flaws of which it is a symptom; to the contrary, the Commission has recognized that "the costs of resources procured to alleviate shortages should be reflected in transparent market prices ***whenever possible***."[117] In this case, PJM identified specific changes that should be made to improve price formation and to reflect costs in the market, rather than uplift, and the December 2021 Order put forward no valid basis for taking a different approach and refusing to adopt those changes here.[118]

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114 *State Farm*, 463 U.S. at 43.

115 December 2021 Order 177 FERC ¶ 61,209 at P 43.

116 *Uplift Cost Allocation & Transparency in Markets Operated by Regional Transmission Orgs. & Indep. Sys. Operators*, 158 FERC ¶ 61,047 at P 2 (2017).

117 April 2012 Order, 139 FERC ¶ 61,057 at P 63 (emphasis added).

118 *See, e.g.*, *Good Samaritan*, 858 F.3d at 629 (explaining that "[o]ne of the bases for finding an agency decision arbitrary and capricious is a deviation from its own prior precedents without sufficient explanation or reasoning" (citation omitted)); *West Deptford*, 766 F.3d at 20 (emphasizing that "[i]t is textbook administrative law that an agency must 'provide[] a reasoned explanation for departing from precedent or treating similar situations differently'" (citation omitted)); *Williams*, 475 F.3d at 322 (vacating

Similarly, the Commission's December 2021 Order attempts to downplay the findings of its prior order concerning the benefits of a downward sloping demand curve by claiming that, "[w]hile the Commission did find PJM's prior capacity construct unjust and unreasonable, it did so based on myriad factors in addition to the fact that the prior capacity construct effectively created a vertical capacity demand curve; it did not categorically find that vertical demand curves are unjust and unreasonable."[119] As an initial matter, waving its hand vaguely at "myriad factors,"[120] without even attempting to explain how the absence of one or more of those factors would justify a different result here, falls well short of what reasoned decision-making requires and amounts to little more than a claimed entitlement to have "a rule for Monday, and another for Tuesday."[121] Moreover, this dismissive approach fails to account for other Commission precedent finding vertical demand curves to unjust and unreasonable.[122] At a minimum, the APA requires that the Commission do more than simply ignore the existence of its conflicting precedent here.[123]

C. The Commission Reversed Its Prior Findings Without Adequate Proceedings

As detailed above, the December 2021 Order suffers from numerous infirmities and fails to satisfy the requirements of the APA in finding that PJM did not satisfy its burden under Section 206 of the FPA to demonstrate the existing Reserve Penalty Factors and ORDCs to be unjust and unreasonable. In fact, there is ample evidence in the record to support findings, like

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orders because the Commission "neither explained its action as consistent with precedent nor justified it as a reasoned and permissible shift in policy").

119 December 2021 Order, 177 FERC ¶ 61,209 at P 44 (discussing the Commission's order in *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079 (2006)).

120 *Id.*

121 *Shell Oil Co. v. FERC*, 664 F.2d 79, 83 (5th Cir. 1981)

122 *See generally ISO New England Inc.*, 153 FERC ¶ 61,338 (2015) ("*ISO-NE*").

123 *See, e.g.*, *Fox*, 556 U.S. at 515; *West Deptford*, 766 F.3d at 20.

those in the Initial Orders, that the Reserve Penalty Factors and two-step ORDCs are unjust and unreasonable. The same cannot be said of the Commission's contrary determinations in the December 2021 Order, as demonstrated by the Commission's almost exclusive reliance on arguments by the IMM. Accordingly, even assuming *arguendo* that PJM did not carry its ultimate "burden under section 206 of the FPA to show that [these] two aspects of its currently effective reserve market are unjust and unreasonable,"[124] PJM indisputably established a *prima facie* case on those questions that required further proceedings before the Commission could reject these aspects of the March 2019 Filings.[125] As the Commission has explained:

> To prevail in a proceeding under section 206, a complainant bears the burden of demonstrating that the [challenged rate] is unjust, unreasonable, unduly discriminatory or preferential. The party with the burden of proof must initially provide sufficient evidence to establish a *prima facie* case. Once a complainant meets its initial burden of production, the burden shifts to the opposing party to present evidence refuting the claims. The ultimate burden of persuasion remains with the complainant and a complainant prevails only if a preponderance of evidence supports its position.[126]

Under the Commission's regulations, a complainant establishes a *prima facie* case if it "(1) [c]learly identif[ies] the action or inaction which is alleged to violate applicable statutory standards or regulatory requirements; [and] (2) [e]xplain[s] how the action or inaction violates

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[124] December 2021 Order, 177 FERC ¶ 61,209 at P 25.

[125] *See Petro Star*, 835 F.3d at 103.

[126] *City of Oakland v. Pacific Gas & Elec. Co.*, 165 FERC ¶ 61,249 at P 24 (2018) (footnotes omitted), *on reh'g*, 167 FERC ¶ 61,097 (2019). *See also, e.g.*, *Colorado Interstate Gas Co. v. FERC*, 904 F.2d 1456, 1459 (10th Cir 1990); *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, Opinion No. 536, 149 FERC ¶ 61,116 at P 45 (2014) ("Opinion No. 536"), *on reh'g*, 153 FERC ¶ 61,144 (2015), *aff'd sub nom. MPS Merchant Servs., Inc. v. FERC*, 836 F.3d 1155 (9th Cir. 2016).

applicable statutory standards or regulatory requirements . . . ."[127] As the Commission has long recognized, "[t]he test for *prima facie* evidence is whether there are facts in evidence which if unanswered would justify men of ordinary reason and fairness in affirming the question which the [proponent] is bound to maintain."[128]

PJM clearly identified the Reserve Penalty Factors and two-step ORDCs as serious flaws in its operating reserve rules and explained how they violated the statutory command that rates be just and reasonable. PJM, as well as Petitioners and other intervenors, also submitted substantial evidence demonstrating that these aspects of the reserve market rules are unjust and unreasonable. On both the Penalty Reserve Factors and two-step ORDC issues, this evidence, including testimony from eminent economists with decades of experience on electric market design issues, would indisputably "justify men of ordinary reason and fairness in affirming the question which the [PJM] is bound to maintain."[129] The Commission's December 2021 Order largely ignores and certainly does not refute this evidence, choosing instead to fault its May 2020 Order for having "relied on broad statements" on these issues.[130] At a bare minimum, the evidence provided by PJM, not to mention that submitted by Petitioners and other parties, warranted investigation

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127 18 C.F.R. § 385.206(b) (2021). *See also Sage Grouse Energy Project, LLC v. PacifiCorp*, 154 FERC ¶ 61,223 at n.73 (2016) (citing same and stating that under "the Commission's regulations, a complainant establishes a prima facie case if the complainant: (1) clearly identifies the action or inaction which is alleged to violate applicable statutory standards or regulatory requirements; and (2) explains how the action or inaction violates the applicable statutory standards or regulatory requirements").

128 *Nantahala Power & Light Co.*, 19 FERC ¶ 61,152 at 61,276 (1982) ("*Nantahala*") (footnote omitted), *aff'd sub nom. Nantahala Power & Light Co. v. FERC*, 727 F.2d 1342 (4th Cir. 1984). *See also, e.g.*, *Panda Stonewall LLC*, Opinion No. 574, 174 FERC P 61266 at P 30 (2021) (same); *Alterna Springerville LLC*, 153 FERC ¶ 61,125 at n.35 (same).Opinion No. 536, 149 FERC ¶ 61,116 at P 46 (same).

129 *Nantahala*, 19 FERC ¶ 61,152 at 61,276 (footnote omitted).

130 December 2021 Order, 177 FERC ¶ 61,209 at PP 28, 36.

through a hearing or other further proceedings.[131] And, as Commissioner Danly explained, further proceedings would have provided an opportunity to better understand the interaction between the reforms rejected in the December 2021 Order and those proposals the March 2019 Filings that were allowed to stand[132] and, more broadly, "to have known what PJM and the market participants might have thought of the consequences of our decisions before we made them."[133]

Separately, but relatedly, in its rush to issue the December 2021 Order, the Commission also put itself in a position where it could not respond to the objections of dissenting Commissioner Danly, whose dissenting statement was not issued until January 20, 2022. The Commission's unexplained failure to take the views of one of its members into account[134] renders the December

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131 *See, e.g.*, *Tesoro*, 234 F.3d at 1293 (finding remand and further proceedings before the Commission necessary where petitioners had "establish[ed] a *prima facie* case"); *City of Willcox v. FPC*, 567 F.2d 394 410-11 (1977) (finding that petitioners had "raise[d] a *prima facie* inference" that the Commission was required to rebut); *Oklahoma Mun. Power Auth. v. Oklahoma Gas & Elec. Co.*, 163 FERC ¶ 61,114 at P 34 (2018) (finding complainants "need only establish a *prima facie* case" in order to show "issues of material fact that cannot be resolved based on the record before us"); *California Pub. Utils. Comm'n v. Pacific Gas & Elec. Co.*, 163 FERC ¶ 61,113 at P 21 (2018) (finding that complainants had "made a *prima facie* case warranting further investigation by providing sufficient support for their allegation"); *Association of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, 149 FERC ¶ 61,049 at P 184 (2014) (finding "substantial evidence that the challenged rates may be unjust and unreasonable . . . adequate to establish a prima facie case" warranting a hearing), *on reh'g*, 156 FERC ¶ 61,060 (2016); *Public Serv. Co. of Ind., Inc.*, 51 FPC 1720, 1721 (1974) (finding that "there is before us at least a *prima facie* case requiring further investigation in an evidentiary hearing").

132 *See* Danly Statement at PP 14-16.

133 *Id.* at P 17.

134 The Commission cannot reasonably claim that it was compelled to issue the December 2021 Order in order to ensure that the Base Residual Auction for the 2023/2024 Delivery Year (the "2023/2024 BRA") was delayed so it could be conducted using a backward-looking E&AS offset, rather than the forward-looking E&AS offset required by the Initial Orders. Even assuming *arguendo* that there was some urgent need to prevent the 2023/2024 BRA from being conducted using a forward-looking E&AS offset, the Commission could have issued a stand-alone order further delaying the 2023/2024 BRA in light of the voluntary remand. *See, e.g.*, *PJM Interconnection, L.L.C.*, 164 FERC ¶ 61,153 (2018) (granting request to delay Base Residual Auction for the 2022/2023 Delivery Year in light of ongoing paper hearing on the Minimum Offer Price Rule); *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,067 (2015) (granting request to delay Based Residual Auction for the 2017/2018 Delivery Year in light of pending "Capacity Performance" proposal).

2021 Order arbitrary and capricious, because, where a dissenting commissioner has raised such serious objections, the Commission "must, at a minimum, acknowledge and consider them."[135]

In addition to ignoring Commissioner Danly's well founded concerns about the merits of the December 2021 Order, the Commission failed to address his serious objections to the process by which this matter came back to the Commission. Petitioners share Commissioner Danly's concern that the Chairman's unilateral direction to the Solicitor's Office to "seek voluntary remand without the knowledge or acquiescence of the Commissioners . . . at least violated longstanding Commission practice and may not have been legal."[136] To be sure, the Chairman is generally "responsible on behalf of the Commission for the executive and administrative operation of the Commission . . . ."[137] But as Commissioner Danly observes, those powers do not extend to "[s]ubstantive policy and regulatory determinations,"[138] and the predicate for the exercise of the Chairman's executive and administrative powers is that it "should be *on behalf of the Commission*."[139] Given that the Commission acts as a body by majority vote,[140] it is hard to see how the motion could have been filed on the Commission's behalf without adherence to its "longstanding tradition of polling the Commissioners for major litigation decisions."[141] The

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135 *AGA*, 593 F.3d at 20. *See also Kamargo Corp. v. FERC*, 852 F.2d 1392, 1398 (D.C.Cir.1988) ("We recognize that this case presents a difficult problem for the Commission, but we think it has no alternative but to confront the questions raised by the [commissioner's] dissent.").

136 Danly Statement at P 1.

137 42 U.S.C. § 7171(c) (2018).

138 Danly Statement at P 4.

139 *Id.* at n.5 (emphasis in original).

140 42 U.S.C. § 7171(e) (2018).

141 Danly Statement at P 3.

December 2021 Order could not have been issued but for that *ultra vires* action, and the order itself is, therefore, unlawful.

IV.

CONCLUSION

WHEREFORE, for the foregoing reasons, Petitioners respectfully request that the Commission grant rehearing of the December 2021 Order as requested herein.

Respectfully submitted,

THE PJM POWER PROVIDERS GROUP

By: /s/ *David G. Tewksbury*
David G. Tewksbury
Stephanie S. Lim
McDermott Will & Emery LLP
The McDermott Building
500 North Capitol Street, NW
Washington, DC 20001

Glen Thomas
Laura Chappelle
Diane Slifer
GT Power Group
101 Lindenwood Drive, Suite 225
Malvern, PA 19355

On behalf of the
The PJM Power Providers Group

ELECTRIC POWER SUPPLY ASSOCIATION

By: /s/ *David G. Tewksbury*
David G. Tewksbury
Stephanie S. Lim
McDermott Will & Emery LLP
The McDermott Building
500 North Capitol Street, NW
Washington, DC 20001

Nancy Bagot
Senior Vice President
Sharon Theodore
Vice President, Regulatory Affairs
Electric Power Supply Association
1401 New York Avenue, NW, Suite 950
Washington, DC 20005

On behalf of the
Electric Power Supply Association

Dated: January 21, 2022

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document on each person designated on the official service lists compiled by the Secretary of the Federal Energy Regulatory Commission in these proceedings.

Dated at Washington, D.C., this 21st day of January, 2022.

/s/ David G. Tewksbury
David G. Tewksbury