**IN THE UNITED STATES COURT OF APPEALS**
**FOR THE DISTRICT OF COLUMBIA CIRCUIT**

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| New Jersey Board of Public Utilities and Public Service Commission of Maryland<br><br>Petitioners,<br><br>v.<br><br>Federal Energy Regulatory Commission,<br><br>Respondent. | Case No. _______ |

**PETITION FOR REVIEW OF**
**THE NEW JERSEY BOARD OF PUBLIC UTILITIES**
**AND PUBLIC SERVICE COMMISSION OF MARYLAND**

Pursuant to Section 313(b) of the Federal Power Act, 16 U.S.C. § 825l(b), and Rule 15 of the Federal Rules of Appellate Procedure, the New Jersey Board of Public Utilities ("NJBPU") and Public Service Commission of Maryland ("MD PSC") petition this Court for review of the following orders of the Federal Energy Regulatory Commission ("FERC" or "Commission"):

- *Calpine Corp., et al. v. PJM Interconnection, L.L.C. and PJM Interconnection, L.L.C.*, "Order Rejecting Proposed Tariff Revisions, Granting in Part and Denying in Part Complaint, and Instituting Proceeding Under Section 206 of the Federal Power Act," Docket Nos. EL16-49-000, ER18-1314-000, ER18-1314-001 & EL18-178, 163 FERC ¶ 61,236 (June 29, 2018).

- *Calpine Corp., et al. v. PJM Interconnection, L.L.C. and PJM Interconnection, L.L.C.,* "Order Establishing Just and Reasonable Rate," Docket Nos. EL16-49-000 & EL18-178-001, 169 FERC ¶ 61,239 (Dec. 19, 2019).

- *Calpine Corp., et al. v. PJM Interconnection, L.L.C. and PJM Interconnection, L.L.C.*, "Order on Rehearing and Clarification," Docket Nos. EL 16-49-001, EL 18-178-001 & ER18-1314-002, 171 FERC ¶ 61,034 (Apr. 16, 2020).

- *Calpine Corp., et al. v. PJM Interconnection, L.L.C. and PJM Interconnection, L.L.C.*, "Order on Rehearing and Clarification," Docket Nos. EL 16-49-002 & EL 18-178-002, 171 FERC ¶ 61,035 (Apr. 16, 2020).

The orders were issued in FERC Docket Nos. EL16-49 and EL18-178. The NJBPU and MD PSC filed timely requests for rehearing to the June 29, 2018 and December 19, 2019 orders. This court has subject matter jurisdiction under 16 U.S.C. § 825l(b).

Respectfully submitted,

*/s/ Miles H. Mitchell*
Miles H. Mitchell
Deputy General Counsel
Tel: 410-767-2972
miles.Mitchell@Maryland.gov

H. Robert Erwin, Jr.
General Counsel
Tel: 410-767-8038
robert.erwin@maryland.gov

Ransom E. Ted Davis
Associate General Counsel
Tel. 410-767-8076
ransom.davis@maryland.gov

Public Service Commission
of Maryland
William Donald Schaefer Tower
6 St. Paul Street
Baltimore, Maryland 21202

*Attorneys for Public Service Commission of Maryland*

**GURBIR S. GREWAL**
**ATTORNEY GENERAL OF NEW JERSEY**

By: */s/ PaulYouchak*
Paul Youchak
Alex Moreau
Deputy Attorneys General
Department of Law and Public Safety
Division of Law
P.O. Box 112
Trenton, NJ 08625
Tel: (609) 815-2278
alex.moreau@law.njoag.gov
paul.youchak@law.njoag.gov

*Attorneys for the New Jersey Board of Public Utilities*

**Dated**: April 27, 2020

## CERTIFICATE OF SERVICE

I hereby certify that on this 27th day of April 2020, I caused the foregoing Petition for Review to be served by mail upon the Secretary of the Commission and the Solicitor of the Commission:

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Robert H. Solomon
Solicitor
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

In accordance with Federal Rules of Appellate Procedure 15(c), I hereby certify that I have caused the foregoing Petition for Review to be served by electronic mail upon each person designated on the official Service List for the underlying Commission proceedings compiled by the Commission Secretary (Attachment B).

By: *<u>/s/ Paul Youchak</u>*
Paul Youchak
Deputy Attorneys General
Department of Law and Public Safety
Division of Law
P.O. Box 112
Trenton, NJ 08625
Tel: (609) 815-2278
paul.youchak@law.njoag.gov

# Attachment A

163 FERC ¶ 61,236
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
Robert F. Powelson, and Richard Glick.

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| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC<br><br>v.<br><br>PJM Interconnection, L.L.C. | Docket Nos. EL16-49-000 |
| PJM Interconnection, L.L.C. | ER18-1314-000<br>ER18-1314-001 |
| PJM Interconnection, L.L.C. | EL18-178-000<br>(Consolidated) |

ORDER REJECTING PROPOSED TARIFF REVISIONS, GRANTING IN PART AND DENYING IN PART COMPLAINT, AND INSTITUTING PROCEEDING UNDER SECTION 206 OF THE FEDERAL POWER ACT

(Issued June 29, 2018)

Paragraph Numbers

1. Over the last few years, the integrity and effectiveness of the capacity market administered by PJM Interconnection, L.L.C. (PJM) have become untenably threatened by out-of-market payments provided or required by certain states for the purpose of supporting the entry or continued operation of preferred generation resources that may not otherwise be able to succeed in a competitive wholesale capacity market.[1] The amount and type of generation resources receiving such out-of-market support has increased substantially. What started as limited support primarily for relatively small renewable resources has evolved into support for thousands of megawatts (MWs) of resources ranging from small solar and wind facilities to large nuclear plants. As existing state programs providing out-of-market payments continue to grow, more states in the PJM region are considering providing more support to even more resources, based on an ever-widening scope of justifications.

2. These subsidies enable subsidized resources to have a suppressive effect on the price of capacity procured by PJM through its capacity market, called the Reliability Pricing Model (RPM). Out-of-market payments, whether made or directed by a state, allow the supported resources to reduce the price of their offers into capacity auctions below the price at which they otherwise would offer absent the payments, causing lower auction clearing prices. As the auction price is suppressed in this market, more generation resources lose needed revenues, increasing pressure on states to provide out-of-market support to yet more generation resources that states prefer, for policy reasons, to enter the market or remain in operation. With each such subsidy, the market becomes less grounded in fundamental principles of supply and demand.

3. This order addresses two proceedings initiated in response to increasing out-of-market support. The first is a complaint against PJM pursuant to section 206 of the

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[1] Out-of-market payments include, for example, the zero-emissions credits (ZEC) programs and Renewable Portfolio Standards (RPS) programs on which we base our determination in this order that PJM's Open Access Transmission Tariff (OATT or Tariff) is unjust, unreasonable, and unduly discriminatory or preferential. As explained below (*see infra* section V.C), we seek comment on the appropriate definition of out-of-market payments for purposes of the replacement rate. We emphasize that we cannot, and need not, address at this time all of the possible ways a state might provide out-of-market support for its preferred generation resources. We need only address the forms of state support that we find, in this proceeding, render the current Tariff unjust and unreasonable—i.e., out-of-market revenue that a state either provides, or requires to be provided, to a supplier that participates in the PJM wholesale capacity market.

Federal Power Act (FPA),[2] filed by Calpine Corporation, joined by additional generation entities (collectively, Calpine), in Docket No. EL16-49-000 (Calpine Complaint). The crux of the Calpine Complaint is that PJM's Tariff and more specifically, the Tariff's Minimum Offer Price Rule (MOPR), is unjust and unreasonable because it does not address the impact of subsidized existing resources on the capacity market. Calpine proposes interim Tariff revisions for immediate implementation that would extend the MOPR to a limited set of existing resources, and it asks the Commission to direct PJM to conduct a stakeholder process to develop and submit a long-term solution.

4. The second proceeding addressed in this order is PJM's recent filing of proposed revisions to its Tariff, pursuant to section 205 of the FPA,[3] in Docket Nos. ER18-1314-000, *et al.* PJM's filing consists of two alternate proposals designed to address the price suppressing effects of state out-of-market support for certain resources.[4] PJM's first, preferred approach is comprised of a two-stage annual auction, with capacity commitments first determined in stage one of the auction and the clearing price set separately in stage two (Capacity Repricing). PJM's second, alternative approach, to be considered only in the event the Commission determines that Capacity Repricing is unjust and unreasonable, revises PJM's MOPR to mitigate capacity offers from both new and existing resources, subject to certain proposed exemptions (MOPR-Ex).

5. We find, based on the record before us, that it has become necessary to address the price suppressive impact of resources receiving out-of-market support. PJM's existing MOPR does not do so, because it applies only to new, natural gas-fired resources. The rationale for that narrow MOPR was that, given the short development time required to bring such resources on-line, they could be used to suppress capacity prices, and indeed certain states had proposed making out-of-market payments to facilitate the entry of new natural gas-fired resources.[5] Although the role of the MOPR, in PJM, originally was

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[2] 16 U.S.C. § 824e (2012).

[3] 16 U.S.C. § 824d (2012).

[4] PJM asserts that, after a lengthy stakeholder process, neither alternative could gain the two-thirds affirmative sector vote needed for endorsement under PJM's rules. *See* Filing at 17.

[5] *See PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022, at PP 2, 141, 153 (2011) (2011 PJM MOPR Order).

limited to deterring the exercise of buyer-side market power,[6] its role subsequently expanded to address the capacity market impacts of out-of-market state revenues.[7] However, because the current MOPR applies only to new natural gas-fired resources,[8] it fails to mitigate price distortions caused by out-of-market support granted to other types of new entrants or to existing capacity resources of any type.

6. Based on the combined records of the Calpine Complaint proceeding and the PJM section 205 filing, we find PJM's Tariff is unjust and unreasonable. We therefore grant the Calpine Complaint, in part, and *sua sponte* initiate an FPA section 206 proceeding in Docket No. EL18-178-000.[9]

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[6] *See PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at P 103 (2006) (2006 PJM MOPR Order).

[7] 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at PP 139-43.

[8] *Id.* P 153; PJM Tariff, Attach. DD, § 5.14(h)(1).

[9] The Commission frequently consolidates the record in related proceedings under FPA sections 205 and 206. Prior MOPR reform proceedings have followed this pattern. *See* 2011 PJM MOPR Order, 135 FERC ¶ 61,022, *order on reh'g*, 137 FERC ¶ 61,145 (2011) (2011 PJM MOPR Rehearing Order), *aff'd sub nom. New Jersey Bd. of Pub. Utils. v. FERC*, 744 F.3d 74 (3rd Cir. 2014) (*NJBPU*); *ISO New England, Inc.*, 131 FERC ¶ 61,065 (2010), *order on reh'g and clarification*, 132 FERC ¶ 61,122 (2010), *order on paper hearing*, 135 FERC ¶ 61,029 (2011) (2011 ISO-NE MOPR Order), *reh'g denied*, 138 FERC ¶ 61,027 (2012), *aff'd sub nom. New Eng. Power Generators Ass'n v. FERC*, 757 F.3d 283 (D.C. Cir. 2014) (*NEPGA*). Consolidation is particularly appropriate when a rate proposal under FPA section 205 fails to remedy the harm identified under FPA section 206. *See, e.g.*, *Monongahela Power Co.*, 162 FERC ¶ 61,129, at P 71 (2018) (*Monongahela*). A rate proposal proceeding may also be transformed into Commission-initiated complaint proceeding when the record indicates that is necessary or appropriate. *See, e.g.*, *Western Resources, Inc. v. FERC*, 9 F.3d 1568, 1579 (D.C. Cir. 1993) (*Western Resources*); *Pub. Serv. Comm'n of State of N.Y. v. FERC*, 866 F.2d 487, 491 (D.C. Cir. 1989) (*PSCNY*). And the Commission may find that its acceptance of a rate proposal under FPA section 205 alters circumstances such that it becomes necessary to change other related rate or tariff provisions under FPA section 206. *See Advanced Energy Management Alliance v. FERC*, 860 F.3d 656, 664 (D.C. Cir. 2017) (*AEMA*).

7. Although we agree with Calpine and PJM that changes to the PJM Tariff are required, we do not accept the changes that have been proposed by either Calpine or PJM. Consequently, we deny the proposed remedy in the Calpine Complaint. We also reject both of PJM's proposals because we find that they have not been shown to be just and reasonable, and not unduly discriminatory or preferential. However, we are unable to determine, based on the record of either proceeding, the just and reasonable rate to replace the rate in PJM's Tariff.

8. As a result, we are consolidating our newly-established proceeding in Docket No. EL18-178-000 (into which the record of Docket Nos. ER18-1314-000, *et al.* is incorporated) with the Calpine Complaint in Docket No. EL16-49-000. We are setting those consolidated proceedings for a paper hearing to address a proposed alternative approach in which PJM would modify two existing aspects of the Tariff. Specifically, this approach would (i) modify PJM's MOPR such that it would apply to new and existing resources that receive out-of-market payments, regardless of resource type, but would include few to no exemptions; and (ii) in order to accommodate state policy decisions and allow resources that receive out-of-market support to remain online, establish an option in the Tariff that would allow, on a resource-specific basis, resources receiving out-of-market support to choose to be removed from the PJM capacity market, along with a commensurate amount of load, for some period of time. That option, which is similar in concept to the Fixed Resource Requirement (FRR) that currently exists in the Tariff, is referred to in this order as the FRR Alternative. Unlike the existing FRR construct, the FRR Alternative would apply only to resources receiving out-of-market support. Both aspects of the proposed replacement rate are more fully explained below.[10]

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[10] Under PJM's existing rules, the FRR option is available to a load-serving entity, at its election, to satisfy its obligation to provide unforced capacity outside of PJM's capacity auction. *See* Reliability Assurance Agreement Among Load Serving Entities in the PJM Region at Schedule 8.1. In this proceeding, the Commission does not propose to eliminate or change the existing FRR option, but instead to add a new resource-specific option with distinct characteristics. However, if changes to the existing FRR option are necessary, we encourage PJM and its stakeholders to consider and discuss any potential changes.

# I. **Background**

## A. **PJM's MOPR**

9. PJM established its MOPR in 2006 to address concerns that certain resources may have the ability to suppress market clearing prices by offering supply at less than a competitive level.[11] PJM's MOPR is designed to protect against this ability by setting a minimum offer level to operate as a price floor. PJM's MOPR requires that all new, non-exempted natural gas-fired resources offer at or above that floor, equal to the Net Cost of New Entry (Net CONE) for the applicable asset class (by generator type and location). A seller, however, may seek a unit-specific review of its sell offer to justify an offer price below the default offer floor.

10. The existing review procedures require the seller to submit a written request for review to both PJM and PJM's Independent Market Monitor (Market Monitor) to demonstrate why the unit is able to offer below the default minimum price. Specifically, the resource must submit documentation on its fixed development, construction, operation, and maintenance costs.[12]

11. Prior to 2011, PJM's Tariff excluded from the MOPR new entry sponsored by a state, under certain conditions (State Mandate Exemption), namely, "any Planned Generation Capacity Resource being developed in response to a state regulatory or legislative mandate to resolve a projected capacity shortfall in the Delivery Year affecting that state, as determined pursuant to a state evidentiary proceeding that includes due notice, PJM participation, and an opportunity to be heard." In a filing submitted by PJM, in Docket No. ER11-2875-000, PJM proposed to replace its State Mandate Exemption with a new requirement providing that a request for a MOPR exception, based on state policy grounds, must be approved by the Commission pursuant to a section 206 authorization, subject to a showing that the relevant sell offer was "based on new entry

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[11] *See* 2006 PJM MOPR Order, 117 FERC ¶ 61,331 at P 103; *see also PJM Interconnection, L.L.C.*, 123 FERC ¶ 61,037 (2008); *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275 (2009); 2011 PJM MOPR Order, 135 FERC ¶ 61,022; 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145; *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090 (2013) (2013 PJM MOPR Order), *order on reh'g & compliance*, 153 FERC ¶ 61,066 (2015), *vacated & remanded sub nom. NRG Power Mktg., LLC v. FERC*, 862 F.3d 108 (D.C. Cir. 2017) (*NRG*).

[12] *See* PJM Tariff, Attach. DD, § 5.14(h)(5).

that is pursuant to a state-mandated requirement that furthers a specific legitimate state objective and that the Sell Offer would not lead to artificially depressed capacity prices or directly and adversely impact [the Commission's] ability to set just and reasonable rates for capacity sales in the PJM Region or any affected Locational Deliverability Area."

12. In the 2011 PJM MOPR Order, the Commission accepted PJM's proposal to eliminate its State Mandate Exemption, but rejected PJM's proposed replacement mechanism as duplicative of an aggrieved entity's right to seek section 206 relief.[13] On rehearing, in response to petitioners' arguments that the Commission had erred in approving the elimination of the State Mandate Exemption, the Commission found that PJM's MOPR "does not interfere with states or localities that, for policy reasons, seek to provide assistance for new capacity entry if they believe such expenditures are appropriate for their state."[14] The Commission added that its objective was "to ensure the reasonableness of the wholesale interstate prices determined in the markets PJM administers."[15]

13. The 2011 PJM MOPR Order also required PJM to propose Tariff revisions that would allow PJM's Market Monitor and PJM to review unit-specific cost justifications for sell offers that would otherwise be mitigated by PJM's MOPR.[16] On compliance, the Commission accepted PJM's unit-specific review procedures, finding that PJM's proposal appropriately addresses concerns from load-serving entities developing resources through arrangements outside of PJM's capacity market.[17]

14. In 2013, to address the effects of new, state-supported natural gas-fired entrants on its capacity market, PJM submitted proposed Tariff revisions to replace the unit-specific review with two categorical exemptions, namely, a competitive entry exemption and self-

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[13] *See* 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 139.

[14] *See* 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 89.

[15] *Id*. It is worth mentioning that the Commission, in the 2011 PJM MOPR Order, contemplated that the existing FRR construct in the PJM Tariff provided a mechanism for "states seeking full independence in resource procurement choices" to "implement a form of capacity procurement that complements the RPM or . . . opt out of the RPM." *See* 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at n.76 and P 193.

[16] *See* 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 121.

[17] *See* 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 242.

supply exemption. While the Commission initially accepted those exemptions, subject to the condition that PJM retain the unit-specific review process, the United States Court of Appeals for the District of Columbia Circuit found, in July 2017, that the Commission exceeded its FPA section 205 authority in modifying PJM's proposal.[18] Accordingly, the Court vacated and remanded the relevant Commission orders. On remand, the Commission rejected PJM's competitive entry exemption and self-supply exemption, effective December 8, 2017.[19] At present, unit-specific review is the only way for a new natural gas-fired resource subject to PJM's MOPR to obtain an exemption from that rule.

### B. Calpine's Complaint

15. In March 2016, Calpine filed its complaint, asserting that PJM's MOPR is unjust and unreasonable because it allows for the artificial suppression of prices in PJM's capacity market, as caused by below-cost offers from existing resources whose continued operation is being subsidized by state-approved out-of-market payments.[20] Calpine cites the out-of-market payments requested by certain resources, pursuant to Ohio authorizations that, as explained below, have since been withdrawn by the entities seeking these out-of-market payments. Calpine also cites the Illinois ZECs program,[21] as evidence of a state subsidy that will have a price suppressing effect on PJM's capacity

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[18] *NRG*, 862 F.3d at 117.

[19] *See PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,252 (2017) (NRG Remand Order) and *PJM Interconnection, L.L.C.*, Docket No. ER13-535-006 (Feb. 23, 2018) (delegated letter order accepting compliance filing).

[20] Calpine Complaint at 2. Calpine also proposed interim Tariff revisions governing PJM's procurements for the 2019-20 and 2020-21 delivery years.

[21] *See* Illinois 99th Gen. Assemb. S.B. 2814 (Dec. 7, 2016). Calpine argues that, under this legislation, out-of-market state revenues will be provided to certain existing nuclear-powered generation units that would otherwise exit PJM's capacity market. Calpine explains that, under this law, the Illinois Power Agency is directed to procure, on behalf of the state's load-serving entities, contracts for ZECs with 10-year terms commencing June 1, 2017. Calpine states that the new law defines a ZEC as a credit that represents the environmental attributes of one MW hour of energy produced from a zero emissions facility, as defined to include those facilities that are: (1) fueled by nuclear power; and (2) interconnected with PJM or the Midcontinent Independent System Operator, Inc. (MISO). Calpine Amended Complaint at 6-9.

market, absent the MOPR revision it seeks.[22] As a remedy, Calpine proposes interim Tariff revisions for immediate implementation that would extend the MOPR to a limited set of existing resources. As a long-term remedy, Calpine urges the Commission to require PJM to propose Tariff revisions addressing this matter.

### C. Related Proceedings

16. In May 2017, Commission staff convened a technical conference, in Docket No. AD17-11-000, to explore the impact of out-of-market support for specific resources or resource types in the regional markets operated by ISO New England Inc. (ISO-NE), the New York Independent System Operator, Inc. (NYISO), and PJM. Following the discussion at the technical conference, staff's notice requesting comments outlined five potential paths forward: (1) a limited, or no MOPR approach; (2) an approach that would accommodate resources receiving out-of-market support; (3) retention of the status quo; (4) an approach that would balance state policy goals and the needs of a centralized capacity market; and (5) an extension of the MOPR to apply to both new and existing resources. PJM, in its comments, stated that it had convened a stakeholder proceeding to consider these matters, as a preliminary step to an FPA section 205 filing.

17. On March 9, 2018, the Commission issued an order accepting ISO-NE's proposal to modify its wholesale capacity market to better accommodate state actions to procure certain resources outside of ISO-NE's wholesale electric markets – a mechanism known as Competitive Auctions with Sponsored Policy Resources (CASPR).[23] In that order, the Commission outlined a series of first principles for capacity markets.[24]

18. On May 31, 2018, following PJM's submission of its FPA section 205 filing in Docket Nos. ER18-1314-000, *et al.*, CPV Power Holdings, L.P., Calpine, and Eastern Generation, LLC (Eastern Generation) (collectively, CPV), filed a complaint against PJM

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[22] Calpine Amended Complaint at 10-11.

[23] *ISO New England Inc.*, 162 FERC ¶ 61,205 (2018) (CASPR Order).

[24] *Id.* at P 21 ("A capacity market should facilitate robust competition for capacity supply obligations, provide price signals that guide the orderly entry and exit of capacity resources, result in the selection of the least-cost set of resources that possess the attributes sought by the markets, provide price transparency, shift risk as appropriate from customers to private capital, and mitigate market power. Ultimately, the purpose of basing capacity market constructs on these principles is to produce a level of investor confidence that is sufficient to ensure resource adequacy at just and reasonable rates.").

in Docket No. EL18-169-000. CPV seeks Commission action under section 206, and a directive requiring PJM to adopt a "clean" MOPR, without exclusions or exemptions, applicable to both new and existing resources.[25]

19. CPV argues that state subsidies represent an imminent threat to PJM's capacity market.[26] CPV further asserts that a "clean" MOPR is required to effectively address the impact of these subsidies and that PJM's proposed self-supply, public entity, and RPS exemptions would prevent MOPR-Ex from adequately addressing the problem.[27] CPV also proposes to eliminate the competitive exemption proposed in MOPR-Ex, because, it claims, only unsubsidized resources, which would not be subject to MOPR-Ex, would be eligible for the exemption.[28] Finally, CPV urges the Commission to require PJM to modify the definition of Material Subsidy, as defined below, to cover not only state subsidies, but also federal subsidies or other support granted after the date of the complaint.[29] The CPV complaint remains pending.

### D. PJM's Filing

20. PJM proposes two mutually exclusive alternatives for ensuring that its capacity market continues to provide just and reasonable price signals, Capacity Repricing, a two-stage pricing mechanism, and MOPR-Ex, an extension of PJM's existing MOPR to apply to both new and existing resources that receive a Material Subsidy, as described more fully below. PJM asserts that, after a two-year stakeholder process, neither of the alternatives submitted in its filing could gain the two-thirds affirmative sector-weighted vote needed for endorsement under PJM's rules. PJM requests that the Commission accept its Capacity Repricing proposal, its preferred approach. PJM requests that if its Capacity Repricing proposal is not accepted by the Commission, then MOPR-Ex should be adopted as a just and reasonable alternative.

21. PJM asserts that, "[i]ncreasingly, states in the PJM Region that chose to rely on competitive markets to ensure resource adequacy have adopted programs that provide

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[25] CPV Complaint at 2.

[26] *Id.* at 10.

[27] *Id.* at 18.

[28] *Id.* at 18-19.

[29] *Id.* at 19.

substantial subsidies to resources that sell wholesale services in PJM's markets."[30] PJM asserts that these programs have progressed to the point that "thousands of megawatts of existing PJM Capacity Resources receive these subsidies" and that the trend is expected to continue.[31] PJM also asserts that there has been a marked increase in the number of state programs that target large-scale, unit-specific resources.[32]

22. PJM argues that reduced capacity price offers from resources that receive such subsidies can significantly reduce capacity clearing prices. These programs, PJM argues, threaten the longstanding balance that has allowed PJM's markets both to remain competitive and to meet resource adequacy objectives at a reasonable rate. PJM has concluded that its Tariff "has no way to address the adverse impacts of certain state subsidies on the PJM capacity market's ability to promote robust supply competition and send appropriate price signals,"[33] and "[d]oing nothing … is not an option."[34]

23. PJM states that Capacity Repricing would replace the existing MOPR with a two-stage auction. The first stage would determine capacity commitments and no resource offers would be mitigated. In the second stage, offers from subsidized resources would be replaced with PJM-determined competitive offers, and the auction would be run again to set the final clearing price for the resources selected in the first stage. In the

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[30] *Id.* at 24.

[31] *Id.* at 24-25.

[32] PJM cites (i) 1,400-3,360 MWs of nuclear generation eligible for ZEC payments under a law recently enacted in Illinois, and legislation recently enacted in New Jersey that would provide similar payments for up to 3,360 MW at the Salem and Hope Creek nuclear facilities; (ii) 250-1,100 MWs of off-shore wind generation required under procurement programs under existing law in Maryland (250 MW) and New Jersey (1,100 MW); and (iii) 5,000–8,000 MWs of generation from various renewable resources eligible under RPS programs in various PJM states, including New Jersey, Delaware, and the District of Columbia. PJM notes that existing RPS commitments total 5,000 MWs and are expected to grow to 8,000 MWs by 2025. *Id.* at 24-27, 32-38. At the time of PJM's Filing, New Jersey's ZEC legislation was pending. It was since signed into law on May 25, 2018. *See* NJ Senate Bill 2313, 2018-19 Legislative Session.

[33] Filing at 5.

[34] *Id.* at 17.

alternative, if the Commission determines that PJM's Capacity Repricing proposal is unjust and unreasonable, PJM requests that the Commission consider the MOPR-Ex proposal to extend the existing MOPR to both new and existing resources, subject to certain exemptions. PJM states that, under its MOPR-Ex proposal, the MOPR would apply to new and existing resources that receive Material Subsidies, as discussed below, unless that resource receives a unit-specific review exemption.[35] For MOPR-Ex, PJM also proposes four categorical MOPR exemptions (as outlined below). In addition, MOPR-Ex would apply to external capacity resources, as well as to internal capacity resources.

24. PJM requests an effective date for its filing (under either of the proposed approaches) of January 4, 2019, in time for the May 2019 capacity auction, and therefore requests waiver of the Commission's 120-day maximum notice rule.[36]

## II. <u>Notice of Filings and Responsive Pleadings</u>

25. Notice of Calpine's Complaint and Amended Complaint was published in the *Federal Register*, 81 Fed. Reg. 18,616 (2016) and 82 Fed. Reg. 5560 (2017), with answers, interventions, and protests due, respectively, on or before April 11, 2016, and January 30, 2017. Notices of intervention and timely-filed motions to intervene were submitted by the entities listed in Appendix 1 to this order, which also lists the abbreviated names for each entity and identifies those entities that submitted comments and protests. Motions to intervene out-of-time were submitted on April 12, 2016, by Talen Energy Marketing, LLC, *et al.* (Talen); on April 14, 2016, by U.W.U.A. Local 457 (Local 457); on May 3, 2016, by the Kentucky Office of the Attorney General (Kentucky AG); on February 9, 2017, by the American Wind Energy Association (AWEA); and on February 24, 2017, by EDF Renewable Energy, Inc. (EDF Renewable). PJM's answer, along with intervenor comments and protests, are summarized below.

26. Additional answers were filed by Calpine, the Electric Power Supply Association (EPSA), FirstEnergy Service Company (FirstEnergy), Exelon Corporation (Exelon), the Maryland Public Service Commission (Maryland Commission), American Electric Power

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[35] PJM notes that, consistent with the current MOPR, MOPR-Ex would apply in all capacity auctions, including incremental auctions, while Capacity Repricing would only apply in annual auctions. *Id.* at 51-52.

[36] *See* 18 C.F.R. § 35.3(a)(1) (2017).

Service Corporation (AEP), PJM, the Load Group,[37] the Office of the Ohio Consumers' Counsel (Ohio Consumers Counsel), the Market Monitor, and the Kentucky AG.

27. On August 30, 2017, Calpine filed a motion to lodge the District Court decision in *Village of Old Mill Creek v. Star*.[38] Answers to the motion were submitted by Exelon, the Illinois Commerce Commission (Illinois Commission), National Rural Electric Cooperative Association (NRECA), Talen, the Load Group, and FirstEnergy.

28. Notice of PJM's filing was published in the *Federal Register*, 83 Fed. Reg. 17,819 (2018), with interventions and protests due on or before May 7, 2018.[39] Notices of intervention and timely filed motions to intervene were submitted by the entities listed in Appendix 2 to this order, which also lists the abbreviated names for each entity. Motions to intervene out-of-time were submitted by the American Council on Renewable Energy (ACORE) and AWEA, on May 8, 2018, by Eastern Generation, on May 9, 2018, and by Shell Energy North America (U.S.), L.P. (Shell), on May 17, 2018. Comments and protests are summarized below.

29. Answers were submitted by American Municipal Power, Inc. (AMP); FirstEnergy; and Exelon and PSEG Companies (PSEG) (collectively, Exelon/PSEG); PJM, the Market Monitor; the PJM Power Providers Group (P3); the Southern Maryland Electric Cooperative, Inc. (SMECO); the New Jersey Board of Public Utilities (New Jersey Board); the Illinois Commission, the Maryland Office of People's Counsel, the New Jersey Division of Rate Counsel, and the Office of People's Counsel for the District of Columbia (Consumer Coalition), and the Illinois Citizen's Utility Board.

## III. Procedural Matters

30. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them, in Docket Nos. EL16-49-000 and

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[37] The Load Group is comprised of Dominion Resources Services, Inc. (Dominion); American Municipal Power, Inc. (AMP); American Public Power Association (APPA); Old Dominion Electric Cooperative (ODEC); PJM Industrial Customer Coalition (PJM-ICC); and the Public Power Association of New Jersey.

[38] *Vill. of Old Mill Creek v. Star*, Nos. 17-CV-1163, *et al.*, 2017 WL 3008289 (N.D. Ill. July 14, 2017) (*Vill. of Old Mill Creek*) (appeal pending before the U.S. Court of Appeals for the Seventh Circuit).

[39] *See PJM Interconnection, L.L.C.*, Docket No. ER18-1314-000, "Notice of Extension of Time" (Apr. 17, 2018).

ER18-1314-000, *et al*., parties to the proceedings in which these interventions were filed. In addition, we grant the unopposed late-filed interventions submitted, in Docket No. EL16-49-000, by Talen, Local 457, the Kentucky AG, AWEA, and EDF Renewable, and in Docket No. ER18-1314-000, *et al*., by ACORE, AWEA, Eastern Generation, and Shell, given their interest in the proceedings in which these pleadings were filed, the early stage of these proceedings, and the absence of any undue prejudice or delay.

31. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2017), prohibits an answer to a protest or an answer to an answer unless otherwise ordered by the decisional authority. We will accept the aforementioned answers because they have provided information that assisted us in our decision-making process.

## IV. Section 205 Review

32. As discussed below, we reject both of PJM's alternative Tariff proposals as unjust and unreasonable. We further find, however, that action must be taken to revise PJM's Tariff, given the inability of PJM's existing rules to adequately address the evolving circumstances presented by resources that receive out-of-market support, as these rules do not apply to existing resources or non-gas-fired generation that receive such support.

### A. PJM's Submission of Two Options

33. As an initial matter, several intervenors maintain that PJM's filing is void *ab initio* because, they claim, under FPA section 205, PJM may not submit a filing requesting that the Commission choose between its Capacity Repricing proposal and its alternative, mutually exclusive MOPR-Ex proposal. Intervenors assert that the Commission, not the utility, would be making the determination, and the Commission would not be acting in the "passive and reactive role" required of the Commission under FPA section 205.[40] Such arguments are moot, and we do not address them, because the Commission rejects both sets of Tariff provisions as unjust and unreasonable.

### B. Capacity Repricing

34. For the reasons discussed below, we reject PJM's Capacity Repricing proposal as unjust, unreasonable, and unduly discriminatory and preferential.

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[40] *See NRG*, 862 F.3d at 114.

### 1. **PJM's Proposal**

35. PJM proposes a two-stage process for committing and then pricing capacity, as part of its annual Base Residual Auction.[41] PJM states that, in the first stage of its auction, any resource that has received a Material Subsidy, as defined by PJM below, would be allowed to clear based on its submitted offer. PJM states that, once it has cleared enough resources to meet its reliability requirement, it will then re-run its optimization algorithm, using the same demand curve but a new supply stack that reprices any resource that has received a Material Subsidy, based on a reference price (the Actionable Subsidy Reference Price), as summarized below.[42]

36. PJM proposes to use materiality thresholds to trigger its two-stage pricing mechanism. Specifically, PJM proposes two thresholds: a region-wide threshold (triggered by the clearance of 5,000 MWs of resources eligible for repricing in the auction) and a targeted threshold for modeled Locational Deliverability Areas (triggered when resources eligible for repricing equal or exceed 3.5 percent of the relevant Locational Deliverability Area's reliability requirement). PJM states that these thresholds will ensure that Capacity Repricing is not implemented until the MW quantity of capacity resources with a Material Subsidy reaches a level so as to have a materially suppressive impact on clearing prices.[43] PJM states that, because the price of a resource in a Locational Deliverability Area may have impacts in other areas within the PJM region, the clearing prices established by any auction re-run will apply region-wide. PJM states that, currently, there is approximately 3,079 MWs of capacity that could be eligible to be repriced.[44]

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[41] PJM clarifies that its two-stage pricing process will not apply to its incremental capacity auctions. PJM Filing at 68.

[42] PJM clarifies that it will continue to clear resources in its Base Residual Auction using its existing optimization algorithm, which determines the least cost overall clearing results that will satisfy PJM's reliability requirements across the PJM region and in each modeled Locational Deliverability Area. The Base Residual Auction will thus continue to "clear at the price-capacity point on the Variable Resource Requirement Curve corresponding to the total Unforced Capacity provided by all Sell Offers located entirely below the Variable Resource Requirement Curve." *Id.* at 59-61.

[43] *Id.* at 60 and 91.

[44] PJM further notes that it has identified 1,674 MWs that may be eligible for

37. PJM proposes to limit its definition of a "Material Subsidy" to: (i) material payments, concessions, rebates, or subsidies directly or indirectly from any governmental entity connected to the construction, development, operation, or clearing in any capacity auction, of the capacity resource, or (ii) other material support or payments obtained in any state-sponsored or state-mandated processes, connected to the construction, development, operation, or clearing in any capacity auction, of the capacity resource.[45]

38. PJM also proposes to exclude from its Material Subsidy definition certain local, state, and federal subsidies.[46] PJM also proposes that resources eligible to be repriced include demand response resources and generation capacity resources 20 MW or greater, including both existing and planned, and internal and external, or an uprate of 20 MW or greater to a generation resource.[47] PJM states that its uprate proposal is identical to the MOPR application threshold previously accepted by the Commission.[48]

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repricing in the ComEd Locational Deliverability Area, which exceeds 3.5 percent of that area's reliability requirement and thus would trigger repricing under PJM's proposal. *Id.* at Attach. 2 (Giacomoni Aff. at P 19).

[45] *Id.* at 69.

[46] Specifically, PJM proposes to exclude: (1) payments (including payments in lieu of taxes), concessions, rebates, subsidies, or incentives designed to incent, or participation in a program, contract or other arrangement that utilizes criteria designed to incent or promote, general industrial development in an area; (2) payments, concessions, rebates, subsidies or incentives designed to incent, or participation in a program, contract or other arrangements from a county or other local governmental authority using eligibility or selection criteria designed to incent, siting facilities in that county or locality rather than another county or locality; or (3) federal government production tax credits, investment tax credits, and similar tax advantages or incentives that are available to generators without regard to the geographic location of the generation. PJM states that these proposed exclusions are the same as those employed in PJM's MOPR, prior to the removal of the competitive entry exemption. *Id.* at 70.

[47] *Id.* at 73.

[48] *Id.* (citing 2013 PJM MOPR Order, 143 FERC ¶ 61,090 at P 170). In addition, PJM proposes to exclude energy efficiency resources from its class of resources subject to Capacity Repricing. PJM asserts that these resources are characterized by reduced consumption and energy conservation and thus do not raise price suppression concerns.

39. PJM asserts that excluding resources offered by certain vertically integrated, cooperative, and municipal utilities is similar to PJM's previously effective self-supply MOPR exemption, which PJM claims is appropriate here to avoid interfering with long-standing capacity procurement business models. PJM nonetheless proposes to limit this exclusion to municipal/cooperative entities (including public power supply entities comprised of either or both, and joint action agencies) and vertically integrated utilities (defined as a utility that owns generation, includes such generation in its regulated rates, and earns a regulated return on its investment in such generation).[49]

40. PJM proposes to calculate its Actionable Subsidy Reference Price based on whether the relevant resource is an existing generation capacity resource; a planned generation capacity resource; or a demand response resource. PJM states that, for an existing generation resource, the Actionable Subsidy Reference Price would be the higher of: (1) the resource's avoidable cost rate, whether determined on a resource-specific basis or as a default for that resource type; and (2) the resource's opportunity cost of committing as a Capacity Performance resource.[50] PJM states that it will calculate its

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For this same reason, PJM proposes to exclude the following resources: (i) resources that obtain a non-material level of Material Subsidies (i.e., less than 1 percent of the resource's actual or anticipated PJM market revenues); (ii) resources for which electricity production is not the primary business purpose, but rather is a byproduct of the business processes; or (iii) resources that are owned or controlled by entities with long-standing business models for capacity procurement (e.g., certain vertically integrated, cooperative, and municipal utilities). *Id.* at 73-74.

[49] PJM does not propose to limit the exclusion to entities which meet certain net-short or net-long thresholds, because PJM states that the purpose of those thresholds was to impact the behavior of the entity with respect to new resources. PJM explains that the thresholds would also be unworkable when applied to existing, as well as new, resources, because it is not possible to determine which resources in the seller's portfolio are the "excess" capacity that should be repriced. *Id.* at 75-77.

[50] PJM proposes two alternative means for selecting the avoidable cost rate. First, the seller could elect to calculate a resource-specific cost rate that would be determined without consideration of any Material Subsidy and in accordance with PJM's Tariff, and would include "a risk premium for assuming a Capacity Performance obligation and [would be] net of Projected PJM Market Revenues." PJM states that, alternatively, if the seller is not willing or able to obtain a resource-specific avoidable cost rate, a default value based on the resource type could be used. *Id.* at 82-83.

avoidable cost rates on an annual basis, with adjustments reflecting, among other things, the actual rate of change in the historical values from the Handy-Whitman Index of Public Utility Construction Costs.[51]

41. PJM states that, for demand resources, it is generally not possible to determine an avoidable cost rate, due to the inherent nature of the resource type. Accordingly, PJM proposes to determine the Actionable Subsidy Reference Price for demand resources using the Market Seller Offer Cap, or Net CONE * B.[52]

42. Finally, in support of its proposal, PJM argues that Capacity Repricing is consistent with the two-stage pricing proposal recently accepted by the Commission, to allow for the implementation of CASPR.[53] PJM asserts that protests in the CASPR proceeding claimed that the substitution auction could induce sub-optimal effects in the primary auction, but that the Commission rejected those arguments.[54] In addition, PJM argues that, under current market conditions, a high-cost marginal seller will likely be a less efficient legacy unit with a limited future economic life, as opposed to a new entry unit traditionally assumed to be at the margin.[55]

### 2. <u>Comments and Protests</u>

43. Several intervenors offer general, or qualified, support for PJM's Capacity Repricing proposal. Although they support the status quo, NEI and PSEG assert that an approach that accommodates state policy choices, like Capacity Repricing, is preferable

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[51] PJM adds that, because its Tariff does not specify avoidable cost rate values for nuclear (single and dual), onshore wind, or solar resources, PJM has determined the ($/MW-day) retirement avoidable cost rate values for each, for the 2022-2023 delivery year, as $706, $663, $503, and $185, respectively, based on a data base compiled by the Environmental Protection Agency, as adjusted to reflect 2022-2023 dollars. *Id.* at 84-85.

[52] *Id.* at 90. The Market Seller Offer Cap, stated in dollars per MW/day of unforced capacity, applies to the price-quantity offer within the Base Offer Segment for an Existing Generation Capacity Resource participating in PJM's capacity auction. *See* PJM Tariff, Attach. DD, § 6.4.

[53] CASPR Order, 162 FERC ¶ 61,205 at P 45.

[54] PJM Filing at 57-58.

[55] *Id.* at 58.

to MOPR-Ex.[56] Similarly, Exelon generally supports a mechanism that would accommodate state-supported resources, arguing that subsidies that address externalities (e.g., the costs attributable to the pollutants caused by fossil fuel generators) make markets more efficient, not less.[57]

**a. Market Design**

44. Numerous other intervenors urge the Commission to reject PJM's Capacity Repricing proposal. The Market Monitor argues that Capacity Repricing is not a market solution and would undermine competitive markets by permitting subsidized units to displace competitive units, and transform PJM's capacity market into a purely residual market.[58] The New Jersey Board argues that PJM's Capacity Repricing proposal is significantly broader than the CASPR approach accepted by the Commission in the case of ISO-NE.[59] Intervenors also assert that PJM's proposal, by paying cleared resources the stage two price, will raise capacity prices but fail to provide commensurate benefits for ratepayers, or otherwise promote resource adequacy or efficient market outcomes.[60]

45. EPSA argues that, under PJM's proposal, state subsidies will dictate entry and exit, undermining the role of the Base Residual Auction clearing price to provide these signals.[61] NRG Power Marketing LCC (NRG) adds that the two stage auction contravenes the principle that a properly designed capacity market should provide price

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[56] NEI Comments at 13; PSEG Protest at 8.

[57] Exelon estimates that these externalities, as measured in the form of carbon dioxide alone, amount to $12.1 billion to $17.7 billion annually across the PJM region. Exelon Protest at 12.

[58] Market Monitor Protest at 19-20.

[59] New Jersey Board Protest at 29 (citing CASPR Order, 162 FERC ¶ 61,205 at P 45).

[60] AMP Comments at 12; APPA Protest at 3; Consumer Coalition Protest at 7; Organization of PJM States, Inc. (OPSI) Comments at 3; New Jersey Board Protest at 21; Clean Energy Advocates Protest at 72 and 92; IMEA Comments at 5; Buyers Group Comments at 2; CEIA Protest at 14; PJM Industrial Coalition (PJM-ICC) Comments at 13-14.

[61] EPSA Protest at 12; *see also* LS Power Comments at 15.

signals that guide the orderly entry and exit of capacity resources.[62] PJM-ICC argues that, for this reason, the clearing price would not be able to serve as a clear, accurate, and meaningful signal to the market.[63] The Maryland Commission asserts that PJM's proposed administratively-determined pricing mechanism lacks transparency.[64] NRG argues that PJM's proposal will not send accurate price signals, because incumbent merchant generators will enter the auction not knowing whether they will ever receive the second stage auction price, even if their offers are below the second stage auction clearing price.[65]

46. NRG argues that PJM's proposal would push economic merchant resources out of the market in favor of subsidized resources and give subsidized resources a windfall by paying them the higher clearing price, even though they are receiving fixed-cost recovery from outside the market.[66] Similarly, PJM-ICC states that this proposal would result in marginal units clearing less often, and may force them to exit the market earlier than they would under the existing MOPR construct or MOPR-Ex proposal.[67] PJM-ICC asserts that Capacity Repricing would prevent otherwise cost-efficient, non-subsidized resources from participating in the marketplace, and hamper regional planning.[68]

47. Some intervenors argue that Capacity Repricing is likely to incentivize more state subsidies.[69] Intervenors argue that Capacity Repricing would allow one state to take an action, in support of its preferred resources, that directly harms loads in another state, by

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[62] NRG Protest at 10-11;*see also* Consumer Coalition Protest at 7-8; Old Dominion Electric Cooperative (ODEC) Protest at 7-9; Joint Commenters Protest at 9; Solar RTO Coalition (Solar Coalition) Protest at 16.

[63] PJM-ICC Comments at 11.

[64] Maryland Commission Protest at 6-7; *see also* Joint Commenters Protest at 9; PJM-ICC Comments at 11.

[65] NRG Protest at 9 – 11.

[66] NRG Protest at 10-14 (and accompanying Aff. of DeRamus and Cain at P38).

[67] PJM-ICC Comments at 10.

[68] *Id.* at 16.

[69] NGSA Comments at 5; NRG Protest at 13-15.

requiring those loads to bear the costs of the state-supported resource.[70] LS Power argues that Capacity Repricing would impose the policy choices of one state against another.[71] EPSA argues that, under PJM's proposal, risks will be shifted from investors in resources subsidized by one state onto investors in unsubsidized resources and consumers in other states.[72] EPSA asserts that such a market design is contrary to the Commission's precedent, prohibiting "the actions of a single state from preventing other states from participating in wholesale markets."[73]

48. Finally, intervenors question PJM's proposed reference prices. The New Jersey Board asserts that PJM's proposed calculation and inputs are unlikely to yield a competitive price, given PJM's reliance on its Market Seller Offer Cap. The New Jersey Board and Clean Energy Advocates assert that PJM's proposal will unjustifiably raise the price of capacity up to the administratively determined cap.[74] Illinois Commerce Commission similarly argues that it is not just and reasonable to impose the maximum price offer level as a minimum price for subsidized resources.[75]

#### b. Bidding Incentives

49. Intervenors also argue that Capacity Repricing's two-stage auction structure would create perverse bidding incentives and/or promote uncompetitive bidding.[76] These intervenors note that certain resources may not clear in stage one, although their offers are below the second stage clearing price. NRG, PJM-ICC, and Consumer Coalition

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[70] *See, e.g.,* NRG Protest at 15; EPSA Protest at 29.

[71] LS Power Comments at 12.

[72] EPSA Protest at 17.

[73] EPSA Protest at 23 (citing 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 143).

[74] New Jersey Board Protest at 29-30; Clean Energy Advocates at 100.

[75] Illinois Commerce Commission at 38-39.

[76] Market Monitor Comments at 21; NRG Protest at 12; Consumer Coalition Protest at 12; Pennsylvania Public Utility Commission (Pennsylvania Commission) Comments at 22; LS Power Comments at 13; API/J-Power/Panda Comments at 9; EPSA Protest at 10-11; PJM-ICC Comments at 12-13.

argue that such a resource may be incented to submit an offer below its going-forward costs to increase its likelihood of receiving a commitment in the first stage,[77] while EPSA suggests that such resources may also drop out of the auction, suppressing the second round clearing price.[78] EPSA, NRG, PJM-ICC, and the Consumer Coalition add that if a portfolio owner has high cost resources that are unlikely to receive a commitment in the first stage, it might be incented to inflate the bids for those resources in the hope of contributing to higher final, second stage clearing prices for other resources.[79]

### c. Threshold and Exemptions

50. Intervenors object to PJM's proposed materiality threshold.[80] Intervenors also question the appropriateness of PJM's proposed definition of a Material Subsidy. Dominion and the Market Monitor state that the definition gives PJM too much discretion.[81] SMECO, the New Jersey Board, and PJM-ICC argue the proposed definition is too broad.[82]

51. Exelon objects to PJM's exemption for resources with a capacity output less than 20 MW, arguing that it is illogical to exempt renewable resources that happen to affect prices in only small increments, when PJM has already conceded that, on aggregate, these resources can suppress prices.[83] NRG opposes PJM's proposed exclusion for public power resources, arguing that it is unnecessary, and that these resources may be

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[77] NRG Protest at 12; Consumer Coalition Protest at 9 (citing accompanying Wilson Aff.); EPSA Protest at 11.

[78] EPSA Protest at 11 (citing accompanying Aff. of DeRamus and Cain).

[79] Consumer Coalition Protest at 10 (citing accompanying Wilson Aff.); EPSA Protest at 10; NRG Protest at 12-13; PJM-ICC Comments at 13.

[80] Market Monitor Comments at 20; *see also* Clean Energy Advocates Protest at 76; LS Power Comments at 13; Maryland Commission Protest at 8.

[81] Dominion Protest at 10; Market Monitor Comments at 20.

[82] SMECO Protest at 3; New Jersey Board Protest at 30-31; PJM-ICC Comments at 21.

[83] Exelon Protest at 59.

uneconomic and could needlessly increase costs to captive consumers.[84] Clean Energy Advocates assert that PJM's proposed self-supply exemption and exemptions for general economic development and local siting have not been supported.[85] Exelon and the New Jersey Board argue that PJM does not adequately justify targeting only certain subsidies, while ignoring others, such as federal production tax credits and subsidized resources of vertically integrated utilities and public power entities.[86] Intervenors also object to PJM's proposal to apply Capacity Repricing to demand response resources, arguing these programs are not meant to suppress prices.[87]

52. The American Public Power Association (APPA) supports the exemption for self-supply resources.[88] SMECO also supports exempting self-supply resources, but questions whether PJM's proposed exemption language would sufficiently insulate capacity owned by a municipal or cooperative entity.[89]

### d. <u>Undue Discrimination</u>

53. Intervenors also argue Capacity Repricing is unduly discriminatory. LS Power asserts that, under PJM's proposal, subsidized resources submitting non-competitive offers would be allowed to secure capacity commitments while unsubsidized generators, who can only recover their costs through the wholesale market, would be impeded from clearing.[90] NGSA argues that Capacity Repricing would allow higher-cost subsidized resources to displace lower-cost unsubsidized resources in the first stage of the auction

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[84] NRG Protest at 16, 19.

[85] Clean Energy Advocates Protest at 84-86.

[86] Exelon Protest at 58; New Jersey Board Protest at 25; 31-32; *see also* SMECO Protest at 3-4.

[87] Pennsylvania Commission Comments at 7; Maryland Commission Comments at 10.

[88] APPA Protest at 5.

[89] SMECO Protest at 5.

[90] LS Power Comments at 10-11.

and thus penalize unsubsidized units.[91] EPSA challenges PJM's claim that its proposal would only displace resources at the higher-cost end of the supply stack.[92]

54. Duke Energy Corporation and Starwood Energy Group Global, L.L.C. (Joint Commenters) argue that PJM's proposal assigns undue preference and advantage based on capacity resources' access to state subsidies.[93] EPSA argues that PJM's Capacity Repricing proposal would not afford investors in unsubsidized resources a reasonable opportunity to recover their investments and, on this basis, would fail to balance investor and consumer interests, as the FPA requires, or provide generators the opportunity to recover their costs.[94] The Consumers Coalition asserts that smaller zones would face a potentially greater impact, with the potential for market manipulation by large portfolio owners with market power in specific zones.[95]

### 3. Answers

55. PJM, in its answer, responds to intervenors' claims that a two-stage auction approach is flawed. PJM argues that its proposal would properly employ PJM's Variable Resource Requirement Curve to determine capacity commitments and clearing prices, similar in principle to the approach previously accepted by the Commission.[96] Exelon/PSEG, in their answer, argue that MOPR-Ex would also yield a price and quantity pair that does fall on the demand curve, given that a state-supported resource

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[91] NGSA Comments at 5.

[92] EPSA Protest at 15-16; *see also* Joint Commenters Protest at 8.

[93] Joint Commenters Protest at 3; *see also* API/J-Power/Panda Comments at 8; SMECO Protest at 3.

[94] EPSA Protest at 18-19 (citing *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) and *Promoting Transmission Investment through Pricing Reform*, Order No. 679, FERC Stats. & Regs. ¶ 31,222, at P 21 (2006)); *see also* LS Power Comments at 9 (arguing that the Commission is obligated under the Constitution and the FPA to ensure that rates are sufficient to yield a return on invested capital).

[95] Consumer Coalition Protest at 12.

[96] PJM Answer at 30 (citing 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at PP 87-104).

that is not selected would nonetheless be providing capacity to the system as a de facto matter.[97]

56. Several parties respond to the argument made by NRG and others that PJM's Capacity Repricing proposal will create perverse bidding incentives and/or promote strategic bidding by incenting sellers to underbid their costs in the first stage of the auction. PJM argues that such a strategy would only work when the second stage price is, in fact, at or above the seller's costs, and that it is unlikely a seller would be able to regularly anticipate the price difference accurately enough to support this strategy.[98] PJM and Exelon/PSEG argue that the other strategy proposed by protestors, to raise the price, is not unique to its proposal and is addressed, under PJM's Tariff, to the extent it triggers market power concerns.[99] Exelon/PSEG argue that though such incentives exist, they are unsupported by any analysis as to their impact.[100]

57. PJM also responds to intervenors' argument that PJM's Capacity Repricing proposal will raise prices to a level that is unjust and unreasonable. PJM argues that its capacity prices are low, currently, because PJM is carrying reserve margins in excess of 25 percent. PJM asserts that, in order for its markets to return to a sustainable reasonable supply and demand equilibrium, some older and mostly uneconomic resources must exit the market. PJM adds that while this exit will increase prices, it will do so to the benefit of those remaining resources and thus avoid the need for ratepayers, or taxpayers, to shoulder further out-of-market obligations by way of new or expanded future subsidy programs or reliability must-run contracts.[101]

58. PJM further notes that, for the most recent auction (for the 2021-22 delivery year) prices increased by more than 80 percent over prior year prices. PJM asserts that this increase can be attributed to 7,400 MW of nuclear resources that did not clear (but will likely clear in the future if they are allowed to participate as subsidized resources).[102]

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[97] Exelon/PSEG Answer at 16 (citing accompanying Aff. of Schnitzer at P 22).

[98] PJM Answer at 33.

[99] *Id*; Exelon/PSEG Answer at 9-10.

[100] Exelon/PSEG Answer at 9-10.

[101] PJM Answer at 10-11.

[102] *Id.* at 12.

Exelon/PSEG also respond to EPSA's argument that Capacity Repricing would create externalities by shifting the costs of one state's policies to another. Exelon/PSEG argue that the ZECs program itself does not impose costs on other states or alter prices received by non-incumbent generators, but may benefit other states.[103]

59. PJM also responds to intervenors' argument that PJM's proposal inappropriately exempts resources owned or controlled by vertically integrated utilities, or municipal utilities. PJM argues that such resources are not similarly situated to resources owned by deregulated or merchant entities, because they are not likely to use uneconomic new entry to suppress prices.[104] In addition, PJM notes that the Commission has previously accepted a comparable exemption for these types of entities.[105] AMP responds to NRG's argument that exempting public power resources is inappropriate because it may lead to captive ratepayers being saddled with unnecessary costs, arguing that a public power entity does not have captive customers. AMP adds that the costs at issue, which may address long-term supply needs, cannot be characterized as unnecessary.[106]

60. PJM responds to intervenors' argument that PJM's proposal is unduly discriminatory because it would target certain subsidies, while ignoring others. PJM argues that intervenors have failed to demonstrate that applying repricing to ZECs and RPS payments is unduly discriminatory, where, as here, these subsidies are expected to grow substantially in the next few years.[107] PJM asserts that participation in an RPS program, if it passes PJM's proposed materiality screen, will be enough to subject a wind project to Capacity Repricing, regardless of whether that resource also receives a federal production tax credit. PJM adds the federal law has recently reduced the amount of the production tax credit paid to wind units, which are also only a small share of PJM's region-wide capacity (a half percent). In addition, PJM argues that using one federal policy to counteract another is not appropriate.[108]

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[103] Exelon/PSEG Answer at 13.

[104] PJM Answer at 28.

[105] *Id.* (citing 2013 PJM MOPR Order, 143 FERC ¶ 61,090 at PP 26, 107-115).

[106] AMP Answer at 3.

[107] PJM Answer at 26.

[108] *Id.* at 26-27.

61. Exelon/PSEG respond to EPSA's argument, under *FPC v. Hope*, that Capacity Repricing would deprive certain resources of the opportunity to recover their costs. Exelon/PSEG argue that this standard does not apply here, where a generator is not compelled to provide capacity.[109]

62. Finally, the Market Monitor argues that PJM's proposal to use default avoidable cost rate values in the determination of the Actionable Subsidy Reference Price is not sufficient. The Market Monitor asserts that a transparent review process that includes a review role for the Market Monitor would be required, with the relevant values submitted to the Commission for its approval. The Market Monitor adds that the values proposed by PJM, in its filing, are excessively high.[110]

### 4. Commission Determination

63. We find that PJM's Capacity Repricing proposal is unjust and unreasonable, and unduly discriminatory and preferential. As proposed, Capacity Repricing would allow resources receiving out-of-market support to submit offers into PJM's capacity market as price-takers, acquiring capacity obligations without mitigation. All other things being equal, this, in turn, would suppress the capacity market clearing price. If certain thresholds for capacity receiving Material Subsidies are reached, Capacity Repricing would then adjust the clearing price paid to all resources with a capacity commitment, including resources receiving Material Subsidies, while excluding other competitive resources (i.e., resources not receiving out-of-market support) that offered below the adjusted clearing price but above the stage one price.

64. First, we find that it is unjust and unreasonable to separate the determination of price and quantity for the sole purpose of facilitating the market participation of resources that receive out-of-market support. PJM's Capacity Repricing proposal artificially inflates the capacity market clearing price to compensate for the participation of resources receiving out-of-market support in the PJM capacity market. PJM's Capacity Repricing proposal would allow such resources to impact the market, and disconnect the determination of price and quantity – a vital market fundamental. We agree with intervenors that, by setting a clearing price that is disconnected from the price used to determine which resources receive capacity commitments, the market clearing price under Capacity Repricing will send incorrect signals, leading to greater uncertainty with respect to entry and exit decisions.

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[109] Exelon/PSEG Answer at 5.

[110] Market Monitor Answer at 12.

65. Though the second stage price may not be suppressed by uncompetitive offers from resources receiving out-of-market support, the higher price—created by repricing—would signal that the market would buy capacity from higher cost resources than actually clear the market and receive capacity commitments. This would make it more difficult for investors to gauge whether new entry is needed, or at what price that new entry will clear the PJM capacity market and receive a capacity commitment. Market participants would see the final, second stage clearing price, but would have limited information on which resources received commitments and the first stage price. As a result, we find that the final clearing price would fail to provide a useful signal to market participants regarding whether a resource will clear the market or whether new entry or retirement is needed, jeopardizing the PJM capacity market's ability to ensure resource adequacy going forward. We confine our finding here, however, to PJM's Capacity Repricing proposal, as submitted, as a stand-alone solution to address the impact of resources receiving out-of-market support in PJM's capacity market.

66. We find it unjust and unreasonable, and unduly discriminatory or preferential, for a resource receiving out-of-market payments to benefit from its participation in the PJM capacity market, by not competing on a comparable basis with competitive resources. Capacity Repricing appears to start from the premise that resources receiving out-of-market support should obtain a capacity commitment at the expense of other resources that, despite offering competitively, are not selected in the first stage of the auction. We reject that premise. Unlike competitive resources, a resource receiving out-of-market support can submit an offer below its true going-forward costs and rely on the Material Subsidy it receives to make up the difference between the auction clearing price and its going-forward costs.

67. In addition, under PJM's Capacity Repricing proposal, a resource supported by a Material Subsidy would not only receive the same clearing price as competitive resources, but would then further benefit from the higher price set in stage two of the auction. PJM's proposal therefore will increase prices for load, and then pay this higher price as a windfall to the very same resources that initially caused the price suppression PJM is attempting to correct. PJM's Capacity Repricing proposal also represents an unjust and unreasonable cost shift to loads who should not be required to underwrite, through capacity payments, the generation preferences that other regulatory jurisdictions have elected to impose on their own constituents.[111]

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[111] 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 3 ("We are forced to act, however, when subsidized entry supported by one state's or locality's policies has the effect of disrupting the competitive price signals that PJM's RPM is designed to

68. We find that this approach unduly discriminates against competitive resources and is unduly preferential to resources receiving out-of-market support. While both types of resources may supply capacity, competitive resources are not similarly situated to resources that receive out-of-market support for purposes of ratemaking in PJM's FERC-jurisdictional wholesale capacity market.[112] The receipt of out-of-market support is a difference that requires different ratemaking treatment when such support has a material effect on price or cannot otherwise be justified by our statutory standards.

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produce, and that PJM as a whole, including other states, rely on to attract sufficient capacity."), *aff'd* sub nom. *NJBPU*, 744 F.3d at 101; *see also Hughes v. Talen Energy Mktg., LLC*, 136 S.Ct. 1288, 1296 (2016) (citing holding in *NJBPU*, 744 F.3d at 79-80, and quoting 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 3).

[112] Typically, undue discrimination cases involve a seller charging a different rate to similarly-situated customers; but undue discrimination can also occur when a seller charges the same rate to differently-situated customers. *See Alabama Elec., Inc. v. FERC*, 684 F.2d 20, 27-28 & n.3 (D.C. Cir. 1982) (*Alabama Electric*) ("[A] single rate design may also be unlawfully discriminatory. . . . It matters little that the affected customer groups may be in most respects similarly situated-that is, that they may require similar types of service . . . . If the costs of providing service to one group are different from the costs of serving the other, the two groups are in one important respect quite dissimilar."); *accord, e.g., Ark. Elec. Energy Consumers, et al. v. FERC*, 290 F.3d 362, 368 (D.C. Cir. 2002) (restating the "central legal proposition" in *Alabama Electric* "that applying the same rate to two groups of dissimilarly situated customers may violate section 205's prohibition against undue discrimination"); *Cities of Riverside and Cotton, Cal. v. FERC*, 765 F.2d 1434, 1439 (9th Cir. 1985) (same); *Complex Consol. Edison Co. of N.Y., Inc. v. FERC*, 165 F.3d 992, 1013 (D.C. Cir. 1999) (explaining that "charging the same rate to differently situated customers could constitute a form of discrimination" under *Alabama Electric* and clarifying that "the critical determination was whether that difference was unreasonable or undue"); *Elec. Consumers Resource Council v. FERC*, 747 F.2d 1511, 1515 (D.C. Cir. 1984) (*Elcon*) ("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."); *see id.* at 1515-16 (holding "that the proposed rate design results in a cross-subsidization, charging high-load factor customers part of the costs of service to low-load customers," and that the "utility has put forth no legally sufficient reason for charging high-load factor customers a rate that does not accurately reflect the cost of serving them").

69. Although FirstEnergy/EKPC argue that Capacity Repricing would eliminate consumers' paying for capacity twice, that effect, even if true, does not alone render PJM's proposal just and reasonable. The Commission has, in the past, found it acceptable or beneficial to avoid requiring customers to pay twice for capacity as a result of state policy decisions. However, the courts have concluded that it need not do so.[113] Those orders in which the Commission accepted such an accommodation emphasized the Commission's view that the accommodation mechanism at issue (specifically, an exemption from ISO-NE's MOPR) was narrowly tailored to have a limited impact on prices for competitive generation based on the way the exemption was structured to track anticipated load growth and resource retirements.[114] The Commission may, and has, accepted PJM Tariff changes limiting PJM's MOPR exemptions, even where those revisions may have required load to "pay twice" for capacity resources that a state requires its constituents to support through out-of-market payments.[115] On review, the United States Court of Appeals for the Third Circuit squarely held that states "are free to make their own decisions regarding how to satisfy their capacity needs, but they 'will appropriately bear the costs of [those] decision[s],' . . . including possibly having to pay twice for capacity."[116]

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[113] *See Connecticut Dept. of Pub. Util. Control v. FERC*, 569 F.3d 477, 481 (D.C. Cir. 2009) (*Connecticut PUC*); *NJBPU*, 744 F.3d at 97; *NEPGA*, 757 F.3d at 295.

[114] *See ISO New England Inc.*, 147 FERC ¶ 61,173, at P 83 (2014) (First RTR Order), *ISO New England Inc.*, 150 FERC ¶ 61,065 (*RTR Rehearing Order*); *ISO New England Inc.*, 155 FERC ¶ 61,023, at P 33 (2016), *order on reh'g*, 158 FERC ¶ 61,138, at PP 43, 48 (2017) (RTR Remand Rehearing Order), *appeal pending sub nom. NextEra Energy Res., LLC v. FERC*, Case No. 17-1110 (D.C. Cir., filed Apr. 3, 2017).

[115] *See* 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 139; 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 87.

[116] *NJBPU*, 744 F.3d at 97 (citing *Connecticut PUC*, 569 F.3d at 481). The D.C. Circuit rejected the same argument when it affirmed "the Commission's decision to decline a categorical mitigation exemption for self-supplied and state-sponsored resources" in ISO-NE. *NEPGA*, 757 F.3d at 295. In that case, as in *NJBPU*, petitioners argued that the Commission "[f]orc[ed load-serving entities] to forgo obtaining their desired resources or pay twice--once for their selected resources and again for auction-selected resources." Petitioner Br. of Mass. Muni. Wholesale Elec. Co., *et al.*, at 11, D.C. Cir. Nos. 12-1074, *et al*. (Mar. 5, 2013). Notwithstanding that argument, the court found

70. PJM argues that its Capacity Repricing proposal is generally consistent with the approach accepted by the Commission, in principle, in the 2011 ISO-NE MOPR Order.[117] We disagree. PJM's Capacity Repricing proposal differs from ISO-NE's proposal in an important respect; while PJM would pay resources receiving Material Subsidies the higher, stage two clearing price, ISO-NE proposed to establish separate clearing prices for existing and new resources, including new resources receiving out-of-market support. Even with this distinction, the Commission found ISO-NE's proposal unjust and unreasonable because it did not appropriately balance the value of accommodating resources receiving out-of-market support with its obligation to clear an appropriate level of capacity.[118] Accordingly, the Commission directed ISO-NE to develop a benchmark pricing mechanism similar to PJM's MOPR.[119] The Commission, in the ISO-NE 2011 MOPR Order, moreover, did not endorse an approach comparable to PJM's Capacity Repricing proposal here, which would require PJM to pay all cleared resources, including resources receiving out-of-market support, the higher "competitive" clearing price. For the reasons discussed above, we find such an outcome unjust and unreasonable and unduly discriminatory.

71. PJM also argues that its Capacity Repricing proposal is generally consistent with the two-stage pricing mechanism accepted by the Commission in the CASPR Order. We disagree. While both PJM's Capacity Repricing and ISO-NE's CASPR proposal use two-tier auctions to address the impacts of resources receiving out-of-market support on capacity prices, the two proposals are otherwise distinguishable. CASPR seeks to maintain the connection between resource selection and price, because CASPR pays the first stage price to all resources committed in that stage. Only Sponsored Policy Resources[120] committed in the second stage pay the second stage price as a one-time

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a categorical exemption for self-supplied and state-sponsored resources would constitute "definitional market distortion in favor of buyers." *NEPGA*, 757 F.3d at 294.

[117] *See* 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029.

[118] *Id.* PP 161-164.

[119] *Id.* P 165.

[120] Specifically, CASPR applies to Sponsored Policy Resources, defined as "a New Capacity Resource that: receives an out-of-market revenue source supported by a government-regulated rate, charge or other regulated cost recovery mechanism, and; qualifies as a renewable, clean or alternative energy resource under a renewable energy portfolio standard, clean energy standard, alternative energy portfolio standard,

severance to a matched retiring resource. CASPR does not allow Sponsored Policy Resources unfettered access to the market (it retains and strengthens ISO-NE's MOPR for all new resources, by phasing out the Renewable Technology Resource exemption) and contemplates that Sponsored Policy Resources may be unable to find partners willing to give up their capacity commitment.[121] For these reasons, we find that PJM's Capacity Repricing, as proposed, is not comparable to ISO-NE's CASPR.

72. Furthermore, PJM has responsibility under section 205 of the FPA to support its Capacity Repricing proposal; however, PJM has not provided any support for the proposed materiality threshold that would initiate PJM's Capacity Repricing proposal. PJM defines a material amount as either 5,000 MW (unforced capacity) across the region, or 3.5 percent of the reliability requirement for any modeled Locational Deliverability Area. At the same time, PJM's testimony states that below-cost capacity offers from resources receiving out-of-market support can result in significant and widespread clearing price reductions using sensitivity analysis adding 3,000 MW and then 6,000 MW of zero-priced supply in and outside the Mid-Atlantic Area Council (MAAC) Locational Deliverability Area.[122] It is not clear how the material threshold amounts (or the MAAC Locational Deliverability Area) were selected given the accompanying testimony. PJM provides no evidence that either the 5,000 MW (unforced capacity) across the region, or the 3.5 percent of the reliability requirement for a modeled Locational Deliverability Area is at the appropriate level. We therefore find that PJM has failed to demonstrate that the proposed threshold is just and reasonable.

### C. <u>MOPR-Ex</u>

73. PJM requests that, in the event its Capacity Repricing proposal is rejected as unjust and unreasonable, the Commission next consider the alternative proposal (MOPR-Ex). MOPR-Ex would expand the application of PJM's MOPR to new and existing resources that receive a Material Subsidy, subject to certain exemptions. For the reasons discussed below, we reject PJM's MOPR-Ex proposal because PJM has not met its

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renewable energy goal, or clean energy goal enacted (either by statute or regulation) in the New England state from which the resource receives the out-of-market revenue source and that is in effect on January 1, 2018." *See* CASPR Order, 162 FERC ¶ 61,205 at P 4 n.6.

[121] *Id.* at PP 99-102.

[122] *See* PJM Filing at Attach. E (Aff. of Adam J. Keech at 2).

section 205 burden to show that MOPR-Ex is just and reasonable, and not unduly discriminatory.

### 1. **PJM's MOPR-Ex Proposal**

74. PJM proposes to extend the MOPR to cover both new and existing resources that receive Material Subsidies, as discussed below, to mitigate the impact of a state subsidy on wholesale prices. PJM states that, while its existing MOPR applies to only certain types of new, natural gas-fired resources, MOPR-Ex would apply to any type of generation resource that receives a Material Subsidy, unless otherwise exempted from the MOPR under the proposed exemptions discussed below.[123] In addition, PJM states that MOPR-Ex would extend the geographic reach of the MOPR to apply to external capacity resources as well as internal capacity resources.

75. PJM proposes to adopt the same definition for Material Subsidy for MOPR-Ex as under Capacity Repricing.[124] PJM adds that, under MOPR-Ex, there would be no resource size threshold.[125] In addition, PJM states that, unlike Capacity Repricing, MOPR-Ex would not apply to demand resources.[126] PJM states that, because MOPR-Ex would expand offer price mitigation to generation resources of all fuel types, a revised MOPR floor offer price will be required, i.e., it would no longer be appropriate to set that floor at PJM's existing Net CONE values for new natural gas-fired resources.

76. Instead, PJM proposes that the MOPR floor offer price be set as the Market Seller Offer Cap, or Net CONE * B, for the Locational Deliverability Area in which the resource is offered. PJM asserts that this revision is appropriate, given the Commission's prior finding that the Market Seller Offer Cap is a "reasonable estimate of a low-end

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[123] *Id.* at 101. In addition to the exemptions discussed below, PJM proposes to exempt Qualifying Facilities, as defined in Part 292 of the Commission's regulations, from MOPR-Ex, noting its existing MOPR exemption for such facilities. *Id.*

[124] *See supra* section IV.B.

[125] PJM Filing at 99, n.240.

[126] *Id.* at 53.

competitive offer, after accounting for all marginal costs, opportunity costs, and risks associated with assuming a Capacity Performance commitment."[127]

77. PJM also proposes to exempt certain resources that it claims are not likely to raise price suppression concerns. First, PJM proposes to extend its unit-specific review allowance to the resources subject to MOPR-Ex. PJM also proposes certain categorical exemptions. Specifically, MOPR-Ex would allow for a categorical self-supply exemption, similar to the new entry exemption accepted by the Commission in the 2013 PJM MOPR Order,[128] and subject to a net-short requirement,[129] and a net-long requirement.[130] PJM also proposes an exemption applicable to public power entities and electric cooperatives. PJM states that, under its public entity exemption, an exemption would be granted using criteria similar to its proposed self-supply exemption.[131]

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[127] *Id.* at 104 (citing *PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,157, at P 184 (2016)).

[128] *See* 2013 PJM MOPR Order, 143 FERC ¶ 61,090 at PP 107-115.

[129] Under PJM's proposed exemption, a single-entity customer would be subject to a 150 MW net-short allowance, while a vertically integrated utility would be subject to net-short allowance equal to 20 percent of its reliability requirement. PJM Filing at 106-107.

[130] For entities with an obligation less than 500 MW, a net-long allowance of 75 MW would apply. For entities with an obligation between 500 and 5,000 MW, the net-long requirement would be set at 15 percent of the entity's obligation. For entities with an obligation between 5,000 and 15,000 MW, the net-long requirement would be 750 MW. For entities with an obligation between 15,000 and 25,000 MW, the net-long limit would be 1,000 MW. Finally, for entities with obligations greater than or equal to 25,000 MW, the net-long limit would be set at 4 percent of that entity's obligation, subject to a 1,300 MW. *Id.*

[131] *See* Proposed Tariff, Attach. DD, § 5.14(h)(9) (Option B). PJM proposes a net-long threshold, set at 600 MW, but does not propose a net-short limitation. PJM also proposes certain cost and revenue requirements. *Id.* PJM also proposes a categorical exemption for competitive entry (a provision voted on by PJM's stakeholders). However, PJM acknowledges that such a competitive entry exemption would not be necessary, given its proposed definition of a Material Subsidy. PJM states that, accordingly, it

78. PJM also proposes an RPS exemption. PJM states that this exemption would apply to capacity market sellers whose resources were either: (i) procured in a program in compliance with a state-mandated RPS program prior to December 31, 2018, or based on a request for proposals under such program issued prior to December 31, 2018; or (ii) in compliance with the requirements of a state-mandated RPS program or voluntary RPS program that is competitive and non-discriminatory. PJM asserts that its first criterion would operate as a transition mechanism, recognizing that sellers had no reasonable prior expectation that the MOPR would be revised under the terms contemplated by MOPR-Ex. PJM states the second criterion would exempt resources procured under state programs that meet certain competitive and non-discriminatory requirements.[132] PJM states that, in addition, if the programs use an auction, the winners of the auction must be determined based on lowest offers; payments to winners must be based on the auction clearing price; and at least three non-affiliated sellers must participate. PJM adds that, if the program does not use an auction, the terms of the program must be consistent with fair market value and standard industry practice.[133]

79. Finally, with respect to undue discrimination claims raised in PJM's stakeholder deliberations, PJM states that "[w]hether or not this form of discrimination is undue … is a decision for this Commission."[134] PJM offers the option of either (i) applying the standards set forth in Capacity Repricing to govern the treatment of renewable resources,

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would consent to a Commission directive requiring the removal of the competitive entry exemption. Filing at n.268.

[132] Specifically, the relevant program must: (1) require load-serving entities to procure a defined amount of renewable capacity resources; (2) allow for the participation by both new and existing resources; (3) apply no supply limitations on participants; (4) rely on requirements that are objective and transparent; (5) exclude selection criteria that could give preference to new or existing resources; (6) apply no indirect means to discriminate against new or existing resources; (7) excludes any locational requirement, other than restricting imports from other states; and (8) applies a renewable characteristic as the only screen for participation. *Id.* at 112.

[133] *See* Proposed PJM Tariff, Attach. DD, § 5.14(h)(10) (Option B).

[134] PJM Filing at 114.

or (ii) identifying this [undue discrimination] question for further stakeholder consideration in subsequent process."[135]

### 2. Comments and Protests

80. A number of intervenors are generally supportive of MOPR-Ex, in principle, or acknowledge PJM's alterative proposal as a just and reasonable option and/or as preferable to PJM's Capacity Repricing proposal. Consumers Coalition asserts that MOPR-Ex, if properly limited in its application, could be accepted as a just and reasonable response to state-supported resources, because it would limit cost increases for ratepayers.[136] The Ohio Consumers Counsel agrees that MOPR-Ex would appropriately mitigate the diverse effects of state subsidies on PJM's capacity market and is not likely to lead to a proliferation of state subsidies.[137] EPSA supports the MOPR-Ex approach of applying PJM's mitigation rules to both new and existing resources, including resources receiving ZECs.[138] The Market Monitor supports MOPR-Ex, asserting that it protects PJM's competitive markets, has majority stakeholder support, and is consistent with long-standing Commission policy. The Market Monitor adds that MOPR-Ex would appropriately provide a disincentive for state policies that discourage competitive investment by suppressing market clearing prices.[139]

#### a. Market Design

81. Other intervenors argue that MOPR-Ex should be rejected. FirstEnergy/EKPC, the Illinois Commission and PSEG argue that MOPR-Ex would frustrate legitimate state

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[135] *Id*.

[136] Consumer Coalition Protest at 13-14.

[137] Ohio Consumers Counsel Protest at 5.

[138] EPSA Protest at 7.

[139] *Id*. at 2, 14. The Market Monitor, however, objects to several of the terms PJM proposes in its Tariff revisions and questions PJM's proposed procedures to be followed when fraud is suspected, arguing that these procedures already exist under PJM's Tariff. *Id*. at 17-19.

policy.[140] The New Jersey Board similarly asserts that, regardless of participation in PJM, states have a right to oversee and regulate their generation portfolio.[141] The Maryland Commission argues that PJM's MOPR-Ex proposal would preclude state support intended to launch new, innovative technologies that may not qualify for one of PJM's proposed exemptions.[142]

82. The Maryland Commission argues that PJM's proposal fails to provide price transparency because it would structure the market to procure more capacity than necessary, potentially resulting in uncertainties in other PJM markets.[143] Exelon argues that MOPR-Ex would select the wrong resources by favoring inefficient polluting resources and treat state environmental programs as hostile to the wholesale markets.[144]

83. Intervenors also object to PJM's proposal to set the default floor at a level equal to the default market seller offer cap. The Illinois Commission argues that PJM's proposed reference price is set too high and is unsupported.[145] FirstEnergy/EKPC argue that there is no economic rationale to set the default offer floor equal to the default offer cap, because offer floors are designed to address buyer-side market power, while offer caps are designed to address supplier-side market power.[146] Exelon asserts that resetting bids to the Market Seller Offer Cap does not fit existing resources whose costs are largely sunk, which could lead to over-mitigation by requiring a commercially operational resource to bid at an offer floor substantially above its going-forward costs.[147]

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[140] FirstEnergy/EKPC Protest at 17; Illinois Commission Protest at 20-21; and PSEG Protest at 9.

[141] New Jersey Board Answer at 2-3.

[142] Maryland Commission Protest at 10.

[143] *Id.* at 10.

[144] Exelon Protest at 42.

[145] Illinois Commission Protest at 39.

[146] FirstEnergy/EKPC Protest at 19.

[147] Exelon Protest at 40 (citing 2013 PJM MOPR Order, 143 FERC ¶ 61,090 at P 26).

### b. Double Payment and Excess Supply

84. Intervenors also address the argument that MOPR-Ex should be rejected because it will require load to pay twice.[148] Rockland, however, supports extending the MOPR to existing resources, even where load may be required to pay twice, noting that any such costs would be limited to the initiating state.[149] ESPA adds that the Commission has expressly rejected arguments about double procurement, in finding that the Commission is not required to prevent any such duplication, or ensure that customers do not pay twice for state-subsidized resources.[150]

85. Some intervenors argue that, by applying the MOPR to existing resources in the capacity clearing process, MOPR-Ex would perpetuate an over-supply of resources, thus moving the price suppression from the capacity market into energy market.[151]

### c. Definitions and Exemptions

86. Several intervenors object to PJM's proposed definition of Material Subsidy. Dominion and Solar Coalition argue that determining what constitutes a Material Subsidy would inappropriately allow PJM to serve as a gatekeeper to its capacity auction and would ultimately lead to higher prices.[152] SMECO objects to a definition that would extend to any state action, whether for renewable energy or otherwise.[153]

87. Vistra argues that demand resources should not be excluded from mitigation under MOPR-Ex.[154] FirstEnergy/EKPC and Exelon argue that a MOPR should be limited in its scope, to apply only to those entities with the intent and ability to exercise market

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[148] *See, e.g.*, NEI Comments at 11; Buyers Group Comments at 3.

[149] Rockland Comments at 4.

[150] EPSA Protest at 26 (citing 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 209).

[151] PSEG Protest at 11; Exelon Protest at 42; and Solar Coalition Protest at 20.

[152] Dominion Protest at 10; Solar Coalition Protest at 21.

[153] SMECO Protest at 3.

[154] Vistra Comments at 13.

power.[155] Exelon adds that buyer-side mitigation has always been limited to new entry.[156] Some intervenors also object to the proposed exemptions. NRG asserts that MOPR-Ex contains too many broad exemptions, and that allowing a segment of resources to bid into PJM's auction at a level that is below their actual costs will prevent the owners of existing resources from earning a return on their investments.[157] The Solar Coalition argues that MOPR-Ex and its exemptions are too complex to be workable.[158]

88. FirstEnergy/EKPC question whether PJM's existing unit-specific exemption can be applied to existing resources.[159] Exelon asserts that PJM's proposal makes no provision for a generator to object to the proxy bid that PJM would be authorized to impose, in lieu of the generator's proposed price, and as such would violate the supplier's section 205 filing rights.[160] The Pennsylvania Commission adds that PJM's proposed unit-specific pricing mechanism relies on financial modeling assumptions that, in practice, may depart significantly from reality.[161] NGSA asserts that PJM's proposed unit-specific review process lacks transparency.[162]

89. A number of intervenors object to PJM's proposed self-supply exemption.[163] NRG asserts that allowing self-supply entities to bid into PJM's auction as price takers suppresses market clearing prices.[164] Intervenors also object to PJM's proposed public

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[155] FirstEnergy/EKPC Protest at 18-19 and Exelon Protest at 38 (citing 2006 PJM MOPR Order, 117 FERC ¶ 61,331, at P 103-104).

[156] Exelon Protest at 38.

[157] NRG Protest at 17-18.

[158] Solar Coalition Protest at 20.

[159] FirstEnergy/EKPC Protest at 19.

[160] Exelon Protest at 59.

[161] Pennsylvania Commission Comments at 20.

[162] NGSA Comments at 7.

[163] *See, e.g.*, Exelon Protest at 56; P3 Protest at 17-18; Vistra Comments at 13-14.

[164] NRG Protest at 18.

entity exemption.[165] ODEC argues that net-long and net-short thresholds are no longer appropriate, and that the Commission should, if it accepts MOPR-Ex, employ the Capacity Repricing exemptions for public power entities, in place of those adopted by PJM in its MOPR-Ex proposal.[166] NRG argues that PJM's public entity exemption fails to include a net-short threshold and has an arbitrary net-long threshold.[167] SMECO also objects to the 600 MW net-long limit, arguing that there might be valid reasons for why a public power entity might be long by this amount, including when it has a loss of load, and that a net-long seller would have no incentive to depress prices.[168]

90. Intervenors also object to PJM's proposed categorical exemption for renewable resources. NRG asserts that it would be unduly discriminatory to exempt resources participating in an RPS program, while ignoring the significant market impact represented by these resources.[169] FirstEnergy/EKPC and Exelon argue that PJM's MOPR-Ex proposal would be unduly discriminatory because it would mitigate resources receiving ZEC payments but not REC payments.[170] Exelon argues that PJM's proposed exemption violates Order No. 719[171] because it bases its mitigation on discretionary criteria.[172] Exelon adds that the Commission would be barred from fixing this defect,

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[165] *See, e.g.*, Exelon Protest at 57; Dayton Protest at 10; NRG Protest at 19.

[166] ODEC Protest at 11-12.

[167] NRG Protest at 19-20; *see also* Duquesne Light Company (Duquesne) Protest at 5 and Dayton Power and Light Company (Dayton) at 10 (arguing the net-long threshold is arbitrary).

[168] SMECO Protest at 6 (citing 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 86).

[169] NRG Protest at 21.

[170] *See, e.g.*, FirstEnergy/EKPC Protest at 19-20, Exelon Protest at 22-25.

[171] *See Wholesale Competition in Regions with Organized Elec. Markets*, FERC Stats. & Regs. ¶ 31,281. at P 379 (2008), *order on reh'g*, Order No. 719-A, FERC Stats. & Regs. ¶ 31,292 (2009), *order on reh'g*, Order No. 719-B, 129 FERC ¶ 61,252 (2009).

[172] Exelon Protest at 53.

because such a change could not be considered a "minor modification" of the sort that *NRG* would sanction.

91. Rockland and PSEG question the proposed provision grandfathering state subsidy programs enacted prior to December 31, 2018, and PJM's proposed RPS exemption.[173] PSEG notes that, in a similar circumstance, the Commission rejected such a proposal for coal units constructed prior to 1957.[174] Clean Energy Advocates express concern that PJM's proposed RPS exemption is overly restrictive such that many state-supported renewable resource would fail to qualify.[175]

### 3. Answers

92. PJM argues that resources receiving Material Subsidies will not be precluded from participating in, or clearing the capacity market; rather, their offers will simply be mitigated to a competitive level.[176] PJM also responds to intervenors' argument that the MOPR should only be applied in cases of market power. PJM argues that buyer-side mitigation is grounded on the impact on the market, not the intent of the seller, as the Commission has repeatedly held.[177]

93. PJM also responds to intervenors' argument that PJM's proposed exemption for resources procured through RPS programs is unduly discriminatory. PJM argues that its proposal appropriately reflects a recognition of state policy goals, while ensuring that its selection process remains competitive. PJM states that, under its proposal, a resource participating in an RPS program would be required to demonstrate that the program is competitive and non-discriminatory and that the resource will not receive a Material Subsidy targeted to keep an otherwise uneconomic resource operating. PJM asserts that this criteria is comparable to the competitive entry exemption, as previously accepted by

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[173] Rockland Protest at 4.

[174] PSEG Protest at 11 (citing 2006 PJM MOPR Order, 117 FERC ¶ 61,331 at P 108).

[175] Clean Energy Advocates Protest at 8, 12.

[176] PJM Answer at 36.

[177] *Id.* at 37 (citing *Midwest Indep. Transmission Sys. Operator*, 139 FERC ¶ 61,199, at P 69 (2012); 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at P 170).

the Commission.[178] The Market Monitor similarly argues that MOPR-Ex would only exempt offers from resources that do not pose a threat to competitive markets, consistent with the categorical exemptions previously in place in PJM.[179] The Market Monitor further argues that RPS programs are generally competitive, while nuclear units do not produce renewable energy and thus are not similarly-situated. The Market Monitor adds that ZECs target individually-identified nuclear generators that are at risk of retirement and are not the product of open, transparent, competitive auctions.[180] In addition, the Market Monitor asserts that RPS programs, unlike ZEC programs, do not explicitly or implicitly seek to change wholesale clearing prices.[181]

94. The Market Monitor also responds to the Clean Energy Advocates' argument that most resources participating in RPS programs in the PJM region may not actually be eligible for PJM's exemption, as proposed. The Market Monitor clarifies that RPS programs that allow non-renewable resources to participate or that procure only one specific type of renewable resource (e.g., solar energy) may still be eligible for the exemption.[182]

95. PJM also responds to intervenors' argument that PJM's proposed RPS exemption inappropriately grandfathers resources receiving Material Subsidies. PJM argues that its proposal appropriately recognizes the long-standing operation of RPS programs within the PJM region and the investment decisions made in reliance on these programs.[183]

96. The Market Monitor responds to the Solar Coalition's objection to an authorization that would allegedly allow PJM and the Market Monitor to determine what qualifies as a state subsidy. The Market Monitor argues that PJM's proposal would not invest this authority in PJM and the Market Monitor.[184] The Market Monitor also

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[178] *Id.* at 38 (citing 2013 PJM MOPR Order, 143 FERC ¶ 61,090 at P 54).

[179] Market Monitor Answer at 5.

[180] *Id.* at 6-7.

[181] *Id.* at 7.

[182] *Id.* at 10.

[183] PJM Answer at 38.

[184] Market Monitor Answer at 4.

responds to the Solar Coalition's argument that MOPR-Ex is likely to suppress energy market prices. The Market Monitor argues that MOPR-Ex will not encourage over-supply; rather, it will provide a disincentive to over-supply and result in competitive prices. The Market Monitor asserts that state-specific subsidies to uneconomic resources are, in fact, the cause of over-supply.[185]

97. The Market Monitor argues that the administrative requirements for implementing MOPR-Ex would be generally the equivalent of PJM's existing MOPR process, including its unit-specific review procedures.[186]

98. The Market Monitor also addresses PJM's proposal to provide, as an option, the use of default avoidable cost rate values in the determination of the Actionable Subsidy Reference Price. The Market Monitor notes that the provisions for defining avoidable cost rate values, as proposed, are insufficient. The Market Monitor asserts that a transparent review process that includes a review role for the Market Monitor would be required, with the relevant values submitted to the Commission for its approval. The Market Monitor adds that the default values proposed by PJM, in its filing, are excessively high.[187]

99. Finally, P3 responds to Exelon's argument that a policy in favor of a strong MOPR is a policy attempting to buttress fossil resources at the expense of clean generation. P3 argues that all resources that receive a Material Subsidy should be mitigated, without exception and regardless of fuel type.[188]

### 4. <u>Commission Determination</u>

100. In contrast to the Capacity Repricing proposal, the MOPR-Ex proposal would prevent some (but not all) resources that receive Material Subsidies from obtaining capacity commitments at the expense of competitive resources. It would also prevent some resources that receive Material Subsidies from suppressing capacity market prices. We nevertheless find, as discussed below, that PJM has not provided "a valid reason for the disparity" among resources that receive out-of-market support through RPS

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[185] *Id.* at 11.

[186] *Id.* at 13.

[187] *Id.* at 12.

[188] P3 Answer at 9.

programs, which are exempt from the MOPR-Ex proposal, and other state-sponsored resources, which are not.[189]

101. The FPA does not forbid preferences, advantages, and prejudices *per se*. Rather, FPA section 205(b) prohibits "undue" preferences, advantages and prejudices.[190] The determination as to whether a Commission-regulated rate or practice that provides different treatment to different classes of entities is unduly discriminatory is fact-based, and turns on whether the relevant classes of entities are similarly situated. "To say that entities are similarly situated does not mean that there are no differences between them; rather, it means that there are no differences that are material to the inquiry at hand."[191] We apply this standard below in finding that PJM has not met its section 205 burden to demonstrate that its proposed RPS exemption is not unjust and unreasonable or unduly discriminatory.[192]

102. PJM's current MOPR applies only to new natural gas-fired resources.[193] It thus excludes wind and solar resources, because, as PJM believed at the time it adopted the current MOPR, those resource options would be "a poor choice if a developer's primary

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[189] *Black Oak Energy, LLC v. FERC*, 725 F.3d 230, 239 (D.C. Cir. 2013) (citing *Elcon*, 747 F.2d at 1515 (internal quotation marks omitted)).

[190] 16 U.S.C. § 824d(b).

[191] *See N.Y. Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,124, at P 10 & n.30 (2018) (*NYISO*) (citing *Iberdrola Renewables, Inc. v. Bonneville Power Admin.*, 137 FERC ¶ 61,185, at P 62 (2011), *reh'g denied*, 141 FERC ¶ 61,233 (2012)). *See also Black Oak Energy, LLC v. FERC*, 725 F.3d 230, 239 (D.C. Cir. 2013) ("We accept disparate treatment between ratepayers only if FERC '"offer[s] a valid reason for the disparity."') (citing *Elcon*, 747 F.2d at 1515); *Ark. Elec. Energy Consumers v. FERC*, 290 F.3d at 367 ("A rate is not unduly preferential or unreasonably discriminatory if the utility can justify the disparate effect.").

[192] *Elcon*, 747 F.2d at 1515 ("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.)

[193] While the MOPR applies to other resource types, PJM's Tariff sets the cost of new entry to those resources as $0. *See* PJM Tariff, Attach. DD, § 5.14 (Clearing Prices and Charges).

purpose is to suppress capacity market prices."[194] Faced with the growing practice of providing out-of-market support for existing resources, MOPR-Ex would expand the pool of resources subject to the MOPR by applying it to new and existing resources receiving Material Subsidies, but would exempt certain resources, including renewable resources procured through an RPS program. PJM, however, recognizes that in today's market, even if a load-serving entity's or a state's primary goal may not be to suppress price, the growing use of out-of-market support of renewable resources can have a significant effect on prices. PJM presents evidence showing that the MW-level of renewable resources receiving out-of-market support has increased significantly and raises price suppression concerns, similar to other resources receiving out-of-market support.[195] Intervenors echo this same concern.[196]

103. PJM estimates that 5,000 MW of renewable resources are needed in 2018 to meet the RPS requirements for energy in the region (with a projection to grow to 8,000 MW by 2025)[197] and that quantities of zero-price offers in this range, including from nuclear units eligible to receive ZEC payments, could create harmful price suppression in its capacity market.[198]

104. Although PJM acknowledges that renewable resources receiving out-of-market support can raise price suppression concerns, PJM's MOPR-Ex proposal attempts to distinguish resources that receive out-of-market support through RPS programs from non-exempt resources receiving other out-of-market support. Specifically, PJM's proposal exempts from the MOPRRPS resources that are procured under competitive and non-discriminatory state programs that meet certain criteria.[199] PJM argues that because it limits the scope of the exemption to these competitively bid resources, it is just and

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[194] *See* 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 153.

[195] PJM Answer at 2.

[196] *See, e.g.*, P3 Protest at 17-18; Duquesne Comments at 5.

[197] PJM Filing at Attach. F (Aff. of Dr. Anthony Giacomoni at 9-10 and Attach. 1) (showing both the current and projected increases in the quantity of RPS resources).

[198] PJM Filing at 28-29 (citing Attach. E (Aff. of Adam J. Keech, at Attach. 2)).

[199] Proposed PJM Tariff, Attach. DD, § 5.14(h)(10) (Option B).

reasonable.[200] PJM's only other justification for allowing such resources to escape mitigation is "deference to public policies favoring renewable generation resources."[201] PJM concedes that, "[w]hether this form of discrimination is undue…is a decision for this Commission."[202]

105. Based on the foregoing, we find that PJM has not provided "a valid reason for the disparity" among generation resources.[203] PJM's justifications do not adequately support the disparate treatment between resources receiving out-of-market support through RPS programs and other state-supported resources. Although PJM contends that MOPR-Ex targets the impact of state resource decisions on PJM's capacity market,[204] PJM has not shown that the exempted resources have a different impact on its capacity market than those which are not exempted. Moreover, PJM's assertion that the RPS exemption was based on deference to public policies favoring renewable generation resources is inconsistent with the well-established desire of some states in PJM to support other resources, such as nuclear plants. In addition, PJM has not explained why its proposed criteria for determining eligibility for the RPS exemption are just and reasonable, and not unduly discriminatory. For example, it is unclear why state programs limited to offshore wind should not be eligible for the RPS exemption given that such resources would likely have a market impact similar to other exempted state-sponsored renewable resources.[205] We also find that PJM has not demonstrated how its competitive requirements for the RPS exemption sufficiently address the potential adverse impacts of these subsidized resources. Accordingly, we find that PJM has not met its section 205 burden to show that MOPR-Ex is just and reasonable, and not unduly discriminatory.

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[200] PJM Answer at 38.

[201] *Id.* at 114.

[202] *Id*.

[203] *Black Oak Energy, LLC v. FERC*, 725 F.3d at 239.

[204] Filing at 96.

[205] Proposed PJM Tariff, Attach. DD, § 5.14(h)(10)(b)(ii)(7) (Option B) (Stating that the program terms may not use any locational requirement, e.g., offshore wind, other than restricting imports from other states).

106. We recognize that, in other markets, the Commission has accepted MOPR exemptions for renewable resources, but in those cases, parties addressed possible disparate treatment through the use of exemptions that imposed MW limits in recognition of the potential for price suppression; such limits are absent in PJM's proposal. In *NYPSC v. NYISO*, the Commission held that it was just and reasonable for NYISO to exempt resources with low capacity factors and high development costs, such as those typically procured as part of an RPS program, from NYISO's MOPR because they provide their developer with limited or no incentive and ability to exercise buyer-side market power.[206] Nevertheless, to limit price suppression that could result even though those resources were not built to exercise buyer-side market power, the Commission required NYISO "to limit the total amount of renewable resources-in the form of a MW cap-that may receive the renewable resources exemption."[207] Similarly, in ISO-NE, the Commission approved ISO-NE's proposed renewable resources exemption given that the exemption's impact on price would be limited not only by the sloped demand curve (which PJM also has) but also by a 200-MW limit on the amount of resources that could qualify for the exemption, based on anticipated load growth and retirements (a feature that PJM's proposed MOPR-Ex does not have).[208] Accordingly, we reject MOPR-Ex.[209]

## V. <u>Section 206 Action</u>

107. We next consider Calpine's claim, in Docket No. EL16-49-000, that PJM's existing MOPR is unjust and unreasonable because it does not address the impact on PJM's capacity market of existing resources that receive out-of-market support. We also consider this same issue, in section V.C of this order below, as raised in Docket Nos. ER18-1314-000, *et al*.

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[206] *N.Y. Pub. Serv. Comm'n. v. N.Y. Indep. Sys. Operator., Inc.*, 153 FERC ¶ 61,022, at P 47-49 (2015) (*NYPSC v. NYISO*).

[207] *Id.* P 47.

[208] *ISO New England Inc.*, 155 FERC ¶ 61,023, at P 39 (2016).

[209] PJM Filing at 113.

### A. Docket No. EL16-49-000

108. On March 21, 2016, as amended on January 9, 2017, Calpine submitted its complaint, pursuant to section 206 of the FPA. We summarize below the positions taken by Calpine, PJM and intervenors.

#### 1. Calpine's Position

109. Calpine requests that PJM be required to revise its MOPR to prevent the artificial suppression of prices in PJM's capacity market, as caused by below-cost offers for existing resources whose continued operation is being subsidized by state-approved out-of-market payments.[210] In its initial Complaint, Calpine asserted that the ratepayer funded subsidies then under consideration in Ohio (pursuant to requests that have since been withdrawn) posed an imminent threat to PJM's market.[211]

110. In its Amended Complaint, Calpine asserts that the relief it requests continues to be warranted in light of the Illinois ZECs program, which will provide subsidies for certain existing nuclear-powered generation units that would otherwise exit the market.[212]

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[210] Calpine Complaint at 2. Calpine also proposed interim Tariff revisions governing PJM's procurements for the 2019-2020 and 2020-2021 delivery years.

[211] On May 2, 2016, as supplemented on May 27, 2016, AEP submitted a Notice of Change in Status, in Docket Nos. ER14-594-000, *et al.*, stating that it did not intend to move forward with two affiliate Power Purchase Agreements (PPA), and related retail rate riders, as previously approved by the Ohio Commission, following the Commission's determination that the retail rate riders represented a reportable change in circumstances from the conditions under which the Commission had granted waiver of AEP's affiliate power sales restrictions. *See Elec. Power Supply Ass'n v. AEP Generation Resources*, 155 FERC ¶ 61,102 (2016). Also, on May 2, 2016, FirstEnergy submitted a request for rehearing to the Ohio Commission, proposing to modify the operation of a related PPA and retail rate rider, such that FirstEnergy's restructured rate plan would not be subject to the Commission's wholesale jurisdiction under the FPA. *See In the Matter of the Application of Ohio Edison Co., Cleveland Elec. Illuminating Co., and Toledo Edison Co. for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan*, at 43, 87, Case No. 14-1297-EL-SSO (Oct. 12, 2016).

[212] Calpine Amended Complaint at 10. On January 25, 2018, pursuant to the Future Energy Jobs Bill, the Illinois Power Agency approved ZECs awards for Exelon's

Specifically, Calpine argues that the preferences attributable to the Illinois program will result in subsidies with a net present value of approximately $1.5 billion payable to the "unregulated" subsidiaries of Exelon, the owners of a 75 percent stake in the 1,871 MW Quad Cities Generating Facility (located within PJM) and the 1,069 MW Clinton Power Station (located within MISO). Calpine argues that, currently, Exelon's facilities are operating on an uneconomic basis.[213] Calpine adds that the Illinois subsidies will create incentives for below-cost offers in PJM's capacity auctions, the effects of which will produce an uneven playing field between new and existing resources.

111. In its answer to protests, Calpine responds to the charge that its Complaint is moot and should be dismissed due to the withdrawal of the Ohio PPAs.[214] Calpine argues that these claims rely on an erroneous characterization of the initial Complaint as raising issues solely relating to the Ohio authorizations. Calpine asserts that the Ohio Authorizations—and the Illinois ZECs program, as addressed by the Amended Complaint—are illustrations of the threat posed by subsidized existing resources. Calpine also challenges protestors' claim that the Amended Compliant is premature.[215] Calpine argues that regardless of the award-date applicable to the Illinois ZECs, it is clear that these payments will be awarded to only two plants—Exelon's Quad Cities Generating Station and Exelon's Clinton Power Station. Calpine asserts that with these two unit's continued participation in PJM's capacity market, over 1,000 MW of subsidized, uneconomic generation will be offered into the 2020-21 Base Residual Auction.[216]

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1,871 MW Quad Cities Generating Station and 1,069 MW Clinton Power Station. *See* Illinois Commerce Commission, Public Notice of Successful Bidders and Average Prices, Illinois Power Agency (Jan. 2018 Procurement of Zero Emission Credits from Facilities Fueled by Nuclear Power). *See* https://www.illinois.gov/sites/ipa/Pages/default.aspx.

[213] *Id.* at 8-9 (citing Illinois Commerce Commission, *Potential Nuclear Power Plant Closings in Illinois* (Jan. 5, 2015)).

[214] Calpine February 14, 2017 Answer to Protests at 9.

[215] *Id.* at 11.

[216] According to an Exelon press release on the results of the most recent capacity auction: "Quad Cities cleared the capacity auction as a result of Illinois legislation that fairly compensates certain nuclear plants for their environmental attributes." *See Exelon Announces Outcome of 2021-2022 PJM Capacity Auction* (May 24, 2018),

112. Calpine also responds to the argument that applying the MOPR to existing resources that are state-supported will frustrate state policies. Calpine reiterates that, in acting on the Amended Complaint, the Commission need not and should not decide whether the FPA preempts state action. Calpine adds, however, that the Illinois ZECs program cannot be allowed to preempt the Commission's exercise of its jurisdictional duties as they relate to wholesale rates, as the Commission's precedent recognizes.[217]

113. In addition, Calpine responds to the argument that the relief requested by the Amended Complaint will threaten RECs and other state-sponsored renewable resource programs. Calpine clarifies that the Amended Complaint does not seek to apply the MOPR to existing or new renewable resources that receive RECs.[218] Calpine further responds to the claim that MOPR exemptions for new renewable resources justify out-of-market ZEC payments to uneconomic existing resources. Calpine asserts that the Commission's acceptance of PJM's existing rules limiting the applicability of the MOPR to natural gas-fired combustion turbine and combined cycle resources was not premised on the excluded resources' environmental attributes or any stated intent to accommodate state environmental policies. Calpine argues that, instead, the Commission's acceptance of these rules as just and reasonable focused on the relevant resources' relatively low costs of construction and their corresponding ability to raise price suppression concerns.[219]

114. Calpine adds that while the Commission has acknowledged state initiatives in approving specific MOPR exemptions in NYISO and ISO-NE, these rulings provide no basis for a blanket exclusion applicable to resources with low or zero emissions attributes. Calpine notes that the exemptions at issue were restricted to intermittent

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http://www.exeloncorp.com/newsroom/exelon-announces-outcome-of-2021-2022-pjm-capacity-auction.*See Exelon Announces Outcome of 2021-2022 PJM Capacity Auction* (May 24, 2018) available at http://www.exeloncorp.com/newsroom/exelon-announces-outcome-of-2021-2022-pjm-capacity-auction.

[217] *Id.* at 4 (citing 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 143).

[218] *Id.*

[219] *Id.* at 5 (citing 2013 PJM MOPR Order, 143 FERC ¶ 61,090 at P 166).

renewable resources and did not cover nuclear resources.[220] Calpine asserts that, in addition, these exemptions were subject to MW caps intended to "further limit any risk that [the] exempted resources will impact [capacity] market prices."[221] Calpine claims that these caps—200 MW in ISO-NE and a proposed 1,000 NW cap in NYISO—would be inadequate to accommodate either of the resources being subsidized under the Illinois ZECs program.

115. Finally, on August 30, 2017, Calpine filed a motion to lodge the District Court decision in *Vill. of Old Mill Creek*, which rejected claims that the Illinois ZEC program is preempted by federal law.[222] Calpine asserts that the decision, if not overturned, will clear the way for thousands of MWs of subsidized nuclear-powered generation that would have otherwise retired to be offered into PJM's capacity auctions at below-cost. Calpine further notes that the District Court, in its ruling, emphasized that "[t]he market distortion caused by subsidizing nuclear power can be addressed by FERC," which has the authority to "address any problem the ZEC program creates with respect to just and reasonable rates[.]"[223]

**2. <u>PJM's Position</u>**

116. PJM, in its answer to the Complaint, generally supports Calpine's request for long-term relief. PJM agrees that, under certain circumstances, sell offers submitted by existing resources into PJM's capacity auctions could result in unjust and unreasonable rates, when such resources are subsidized by out-of-market state revenues.[224] PJM argues that, as such, a finding that the existing MOPR is unjust and unreasonable would be supportable.

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[220] *Id.* at 6 (citing *NYPSC v. NYISO*, 153 FERC ¶ 61,022 at P 51; RTR Remand Rehearing Order, 158 FERC ¶ 61,138, at P 10).

[221] *Id.* (citing *NYPSC v. NYISO*, 153 FERC ¶ 61,022 at P 51).

[222] *Vill. of Old Mill Creek*, Nos. 17-CV-1163, et al., 2017 WL 3008289 (appeal pending before the U.S. Court of Appeals for the Seventh Circuit).

[223] Calpine August 30, 2017 Motion at 4 (citing *Vill. of Old Mill Creek*, 2017 WL 3008289 at *14).

[224] PJM April 11, 2016 Answer at 2.

### 3. **Intervenor Arguments**

117. The Market Monitor agrees with Calpine that PJM's MOPR is unjust and unreasonable, given its failure to mitigate offers for existing resources that receive subsidies through non-bypassable charges.[225] PSEG also agrees that PJM's existing MOPR is unjust and unreasonable because it fails to deal with the threats posed by subsidized existing resources.[226] NGSA adds that, if existing resources supported by out-of-market state revenues are allowed to participate in PJM's capacity auctions and suppress market clearing prices, it will be increasingly difficult for gas-fired generators to have the means to invest in performance enhancing measures, as contemplated by PJM's Capacity Performance protocols.[227] Direct Energy concurs that PJM's MOPR should be revised to apply to existing resources that receive out-of-market state revenues, given the ability of these resources to suppress prices in PJM's capacity auctions.[228]

118. Other intervenors disagree. In their protest to the Complaint, AEP and FirstEnergy argue that Calpine has failed to provide a rationale for overturning the Commission's prior finding that a resource that has cleared in one auction "has demonstrated that it is needed by the market" and that its "presence in the market . . . does not artificially suppress market prices."[229] Exelon argues that PJM's MOPR, if revised to apply to existing resources, must not unduly discriminate against nuclear resources or thwart state actions addressing environmental policies.[230] EKPC adds that a revised MOPR should not apply to nuclear and coal-fired resources without exception,

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[225] Market Monitor April 11, 2016 Comments at 5; *see also* Rockland April 11, 2016 Comments at 4; EDF Renewable April 11, 2016 Comments at 5.

[226] PSEG April 11, 2016 Comments at 12; *see also* API April 11, 2016 Comments at 5 (arguing that "PJM's current market rules do not adequately protect the market from the corrosive effects of below-cost bidding due to out-of-market subsidies for existing generation facilities").

[227] NGSA April 11, 2016 Comments at 6-7.

[228] Direct Energy April 11, 2016 Comments at 5.

[229] AEP April 11, 2016 Protest at 25; FirstEnergy April 11, 2016 Protest at 16-18 (citing 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 175); *see also* EKPG April 11, 2016 Protest at 6.

[230] Exelon April 11, 2016 Protest at 4.

given the lack of clarity as to how a cost-based offer from such a resource would be estimated.[231]

119. Comments generally supportive of the Amended Complaint were submitted by the Market Monitor. Protests requesting that the Amended Complaint be denied, in whole or in part, were filed by Exelon; the Load Group; Dayton/EKPC/FirstEnergy;[232] the Illinois Commission; the Illinois Attorney General; AWEA; the Environmental Defense Fund, Natural Resources Defense Council, and Sustainable FERC Project (Environmental Coalition); and the Nuclear Energy Institute (NEI). The Pennsylvania Public Utility Commission (Pennsylvania Commission) and the New England Power Pool Participants Committee (NEPOOL Participants Committee) take no positions on the merits of the filing, but filed comments addressing other matters, as summarized below.

120. The Load Group argues that the Amended Complaint amounts to an entirely new complaint, raising claims unrelated to the transaction or occurrence addressed in the initial Complaint.[233] The Illinois Commission and the Illinois Attorney General assert that the Amended Complaint lacks support, including a quantification of the financial impact or burden created by the action or inaction alleged.[234] Exelon and the Environmental Coalition agree, noting that the Amended Complaint fails to state, as required, whether the issues it raises are pending "in any other forum in which the complainant is a party [and] why timely resolution cannot be achieved in that forum."[235]

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[231] EKPC April 11, 2016 Protest at 6.

[232] In addition, Dayton/EKPC/FirstEnergy filed a Motion to Dismiss on January 24, 2017, that also responds to the Amended Complaint.

[233] Load Group January 30, 2017 Protest at 5 (citing *McCulloch Interstate Gas Corp.*, 10 FERC ¶ 61,283, at 61,561 (1980)); *see also* Environmental Coalition January 30, 2017 Protest at 7.

[234] Illinois Commission February 3, 2017 Protest at 8-9; Illinois Attorney January 30, 2017 Protest at 5; *see also* Exelon January 30, 2017 Protest at 12 (citing *Texas Gas Transmission Corp.*, 63 FERC ¶ 61,240, at 62,656 (1993) ("Texas Gas is premature in seeking to implement a corporate tax rate that is not yet in effect.")).

[235] Exelon January 30, 2017 Protest at 15; Environmental Coalition January 30, 2017 Protest at 8.

121. The Load Group and the Illinois Commission argue in the alternative that, even assuming the Amended Complaint is not procedurally deficient, it nonetheless fails to establish that PJM's existing MOPR is unjust and unreasonable, given that no evidence has been presented of any improper price suppression in PJM's markets attributable to ZECs.[236] Exelon adds that the PJM market has had no difficulty attracting new entry and incentivizing the retirement of uneconomic resources.[237]

122. The Load Group, Exelon, and the Illinois Commission assert that, regardless, the Amended Complaint fails to establish that the expansion of the MOPR to existing resources is just and reasonable. The Illinois Commission argues that such a remedy would frustrate Illinois' efforts to support its environmental initiatives.[238] The Load Group adds that the Amended Complaint attempts to use the MOPR as a tool to ensure higher revenues for generators.[239]

123. The Illinois Commission and Exelon also argue that applying the MOPR to resources participating in the Illinois ZECs program would be unduly discriminatory towards Illinois' efforts to support the beneficial environmental attributes provided by those resources. Exelon adds that it would be impermissibly discriminatory to impose the MOPR on existing resources that receive ZECs, while exempting other resources that receive other environmental attribute payments, or other types of support, such as tax credits or development incentives, or that operate as self-supply resources.[240]

124. The Illinois Commission and Exelon note that, under PJM's rules, the MOPR does not apply to a renewable resource, even if that resource receives out-of-market state revenues, while other resources receive other governmental benefits, including tax incentives, development credits, and other benefits that affect both costs and revenues of

[236] Load Group January 30, 2017 Protest at 8; *see also* AWEA February 9, 2017 Protest at 4.

[237] Exelon January 30, 2017 Protest at 3.

[238] Illinois Commission February 3, 2017 Protest at 7.

[239] Load Group January 30, 2017 Protest at 9.

[240] Exelon January 30, 2017 Protest at 16.

units participating in the markets.[241] The Illinois Commission adds that a similar treatment is warranted in the case of ZECs, given the similarities among these resources.[242] In addition, the Illinois Commission asserts that accommodation is required in the case of ZECs, given the Commission's stated policy in Order No. 1000 regarding the need of an RTO/ISO to respect state public policy requirements through regional transmission planning.[243] The Environmental Coalition and Exelon add that the ZEC program will operate in a manner that mirrors REC programs that the Commission has recognized as within states' authority to enact.[244] The Environmental Coalition further argues that RECs, like the ZEC payments at issue here, reflect the value of environmental attributes that are sold separate and apart from PJM's energy and capacity markets.

125. Exelon argues that PJM's capacity market appears to be performing as it should, with the market successfully ensuring resource adequacy. Exelon notes, for example, that for the 2019-20 delivery year, PJM's reserve margin stands at 22 percent, exceeding PJM's target of 16.5 percent.[245] Exelon further notes that PJM has attracted a significant level of new entry extending over its last three Base Residual Auctions for a total of more than 18.3 GW of new capacity, while incentivizing the exit of uneconomic resources at a level of 16.2 GW of retirements or de-rates.

126. Exelon asserts that the capacity provided by existing resources has contributed to prices that the Commission has already found to be just and reasonable. Exelon argues that, as such, the operation of its nuclear units with ZEC payments should not trigger

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[241] Illinois Commission February 3, 2017 Protest at 5; Exelon January 30 Protest at 16.

[242] Illinois Commission February 3, 2017 Protest at 5.

[243] *Id.* at 6 (citing *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323, a P 6 (2011), *order on reh'g*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff'd sub nom. S.C. Pub. Serv. Auth.* v. *FERC*, 762 F.3d 41 (D.C. Cir. 2014)); *see also* Environmental Coalition January 30, 2017 Protest at 19-20.

[244] Exelon January 30, 2017 Protest at 26 (citing *WSPP Inc.*, 139 FERC ¶ 61,061, at PP 18-24 (2012)); *see also* Dayton/EKPC/FirstEnergy January 30, 2017 Protest at 7.

[245] *Id.* at 14-15.

mitigation.[246] Exelon adds that the ZEC program is not a price suppression mechanism, and would not make payment contingent on clearing the capacity market, as a price-suppression mechanism would, in order to most directly forestall increases in capacity prices.[247] In addition, Exelon cites Commission precedent holding that it is just and reasonable to design buyer-side mitigation rules to "complement[] state programs promoting renewable resources" and other environmental aims.[248]

### B. Docket Nos. ER18-1314-000, *et al.*

127. PJM, as discussed below, asserts that taking no action in response to its section 205 filing is not an option. A number of intervenors agree, arguing that the Commission should act in this case under section 206, if it determines that neither of PJM's proposals is just and reasonable. Other intervenors disagree, arguing that PJM's existing rules are adequate and need not be revised, based on current market conditions. We summarize the basis for each of these positions below.

#### 1. PJM's Position

128. While PJM does not explicitly contend that its Tariff is unjust and unreasonable, PJM states that taking no action in this proceeding is not an option because its current Tariff has no means to address the increasing use of state-supported out-of-market subsidies to resources to which its current MOPR does not apply: non-natural gas fired resources and existing resources.

129. PJM argues that, as such, its Tariff must be revised, notwithstanding the fact that capacity commitments in PJM are currently in excess of PJM's installed reserve margin and PJM continues to attract new entry. PJM argues that new entry has not been driven by a growth in demand, given that demand in the region has been relatively flat for a number of years. Instead, PJM argues that new entry has been incented by low natural gas prices and improvements in technology leading to more efficient generation, i.e., generation that can be expected to replace older, less efficient generation over time.[249]

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[246] Exelon January 30, 2017 Protest at 17-19, 25 (citing Affidavit of Robert Willig at P 50).

[247] *Id.* at 25-26.

[248] *Id.* at 19 (citing First RTE Order, 147 FERC ¶ 61,173 at P 82.

[249] *Id.* at 37.

However, PJM asserts that, regardless of the capacity excess, being long on capacity does not justify setting subsidized clearing prices.[250]

130. PJM states that, approximately 20 years ago, a number of states in the PJM region, including Illinois, Maryland, New Jersey and Ohio, chose to restructure their electric services and introduce greater reliance on competition, in lieu of relying on an administratively-determined integrated resource plan.[251] PJM states that currently, however, many of these same states are increasingly seeking to procure capacity outside of PJM's wholesale market, to encourage development or retention of select resources with attributes they favor.[252]

131. PJM asserts these state programs include: (i) ZECs, payable under an Illinois program to a 1,400 MW nuclear facility; (ii) pending legislation in New Jersey that would provide similar payments for up to 3,360 MW at the Salem and Hope Creek nuclear facilities;[253] (iii) off-shore wind procurement programs in Maryland (250 MW) and New Jersey (1,100 MW); and (iv) RPS programs in various states in the PJM region, including New Jersey, Delaware, and the District of Columbia, requiring load-serving entities to meet a certain percentage of their load with RPS-eligible facilities, or buy Renewable Energy Credits from such facilities. PJM estimates that satisfying the current RPS obligation in the PJM region would require nearly 5,000 MW of capacity. PJM notes that, cumulatively, these programs have, or will, provide subsidies to thousands of MWs of PJM capacity and that similar programs are likely to be implemented elsewhere.[254]

132. PJM asserts that retaining or compelling the entry of resources that the market does not regard as economic, suppresses prices for resources the market does regard as economic. PJM adds that, in turn, this leads to suppressed revenues for resources that

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[250] *Id*.

[251] *Id.* at 21.

[252] *Id.* at 24.

[253] As noted above, the governor of New Jersey has now signed this legislation into law.

[254] PJM Filing at 26-27, citing Attach. F (Aff. of Dr. Anthony Giacomoni at 9-10 and Attach. 1) (showing both the current and projected increases in the quantity of RPS resources).

depend on these prices to support their continued operation or their economic new entry. PJM states that existing states subsidy payment rates, when converted to MW-day values, exceed capacity clearing prices in PJM's most recent annual auction. Specifically, PJM asserts that the Illinois ZEC prices equate to about $265/MW-day; New Jersey on-shore wind REC prices equate to $250/MW-day, Delaware's estimated on-shore REC prices equate to $253/MW-day, and solar REC prices in the District of Columbia equate to $4,751/MW-day.[255]

133. PJM states that allowing for the submission of even comparatively small quantities of subsidized offers into its capacity auction will disproportionately reduce the clearing prices paid to all resources.[256] Specifically, PJM asserts that adding less than 2 percent of zero-price supply to area outside of the MAAC zone would reduce clearing prices in the RTO by 10 percent, while adding only 7 percent of zero-priced supply (about 2,000 MW) to the EMAAC zone would reduce the clearing price in that zone by approximately a third. PJM states that if a state selectively subsidizes certain resources while still depending on the wholesale capacity market to meet its overall resource adequacy needs, the state actions will impact not only capacity resources excluded from the state out-of-market revenue program, but also other states that may not embrace the subsidizing state's chosen policy preference.[257]

134. Finally, PJM notes that if enough resources price their capacity offers relying on their selective-receipt of subsidies, other sellers in PJM's market that do not receive subsidies will receive an artificially-suppressed, unjust and unreasonable rate, competitive entry will face a significant added barrier, new subsidies will be encouraged, and one state's policy choices could crowd out other competitive resources and result in policy choices on which other states rely.[258]

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[255] *Id.* at 28 and Attach. F (Aff. of Dr. Anthony Giacomoni at 31).

[256] *Id.* *See also* Filing at Attach. E (Aff. of Adam J. Keech at 6).

[257] *Id.* at 29.

[258] *Id.* at 4.

### 2. **Intervenors' Positions**

#### a. **Support for Section 206 Action**

135. Many intervenors argue that PJM's existing capacity market rules are unjust and unreasonable.[259] The Market Monitor argues that the spread of subsidies in support of uneconomic resources, including, in particular, nuclear and coal-fired resources, poses a threat to PJM's capacity market, as well as its energy market, by displacing resources and technologies that would otherwise be economic.[260]

136. Dayton argues that the effects of one state's decision to grant a subsidy is not confined to its geographical boundaries. Dayton asserts that while these subsidies may bestow a benefit to the market participants that receive them, they harm customers and suppliers located elsewhere in the PJM region.[261]

137. EPSA agrees that PJM's existing capacity market rules fail to address the growing threat posed by existing resources that receive state support. EPSA asserts that state initiatives in Illinois, New Jersey, Maryland, and other PJM states currently provide subsidies to thousands of MWs of capacity, with the level of this capacity projected to grow significantly. EPSA argues that adding comparatively small quantities of subsidized offers disproportionately reduces the clearing prices paid to all resources, thus suppressing prices.[262] EPSA notes, for example, that subsidized offers from the Quad Cities and Three Mile Island nuclear facilities would reduce PJM's RTO-wide clearing price by 2 percent and the ComEd Locational Deliverability Area by 10 percent.[263]

138. LS Power argues that, in the face of these subsidies, private investment cannot and will not continue because independent power producers can no longer assume that new

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[259] Market Monitor Comments at 6-8; NGSA Comments 9; EPSA Protest at 32; NRG Protest at 24; FirstEnergy/EKPC Protest at 5; PSEG Protest at 11-12; LS Power Comments at 4; Dayton Protest at 2; Vistra Comments at 4; API/J-Power/Panda Comments at 6-7.

[260] Market Monitor Comments at 6-8.

[261] Dayton Protest at 2.

[262] EPSA Protest at 32; *see also* LS Power Comments at 6.

[263] *Id.* at 32-33.

entry will be able to outcompete and displace older, less efficient incumbent resources.[264]NRG agrees that PJM's existing rules are unjust and unreasonable, given their inability to protect the market from out-of-market subsidies.[265]

139. FirstEnergy/EKPC urge the Commission to adopt a holistic solution to the fundamental flaws in PJM's market design, by: (i) acknowledging and accommodating the ability of states to implement valid public policy programs; and (ii) incorporating the value of fuel diversity, fuel security and environmental attributes into PJM's market clearing prices. FirstEnergy/EKPC cite to the inability of PJM's existing capacity market rules to select the least-cost resources that also possess the attributes that have been identified by states in the PJM region. FirstEnergy/EKPC note, however, that there is no need for immediate action to address the impact of state-supported resources.[266]

140. PSEG argues that, if section 206 procedures are instituted in this proceeding, the Commission should adopt a remedy that values important generator attributes, including the achievement of environmental goals and energy resilience. PSEG asserts that such a remedy could include carbon pricing in PJM's energy market, or enhanced payments made directly by PJM to generating plants needed to meet fuel diversity standards.[267]

141. NRG argues that a mechanism to accommodate state policy choices in the market could be just and reasonable, if it: (i) ensured that state-supported resources are able to access capacity market revenues; (ii) ensured that capacity market prices reflect the unsubsidized economics of marginal units; (iii) avoided placing costs and risks of accommodating state-supported resources onto consumers in other states; (iv) avoided creating incentives for suppliers to price offers at other than their costs; and (v) provided incentives to states to use PJM's markets to achieve their policy goals.[268]

142. NRG asserts that an approach which mitigates the impact of state policy decisions on the market could be just and reasonable if it implemented a zero-exemption allowance,

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[264] LS Power Comments at 4-5.

[265] NRG Protest at 2, 24.

[266] FirstEnergy/EKPC Protest at 11; *see also* Exelon Protest at 41 (supporting the adoption of a carbon price).

[267] PSEG Protest at 11-12.

[268] NRG Protest at 27.

while retaining a unit-specific review process. NRG adds that if an exemption is permitted for RPS participants, it should follow the outlines approved in the CASPR Order, requiring the resource to bid at a price that reflects the market value of its Renewable Energy Credits.[269]

143. ODEC argues that without protection of self-supply by load-serving entities like ODEC, the status quo is not just and reasonable.[270]

**b. <u>Support for Status Quo</u>**

144. Other intervenors contend PJM's Tariff remains just and reasonable. These intervenors assert that PJM' existing capacity market functions properly, or requires no revision at this time, in the absence of further stakeholder deliberations. Clean Energy Advocates assert that there is no sign of a systematic lack of adequate capacity that threatens reliability; to the contrary, they claim, there is excess capacity, with investors eager to enter the market, with no long-term threat foreseeable. The Maryland Commission adds that PJM's capacity auctions have consistently exceeded PJM's target reserve margins. Dominion notes that what the existing MOPR does not do, and should not do, is attempt to mitigate existing capacity resources. Dominion argues that there is no price suppressive effect on capacity prices when an existing resource does not retire because it receives compensation from a state public policy initiative that is not available from the wholesale market. The Consumer Coalition adds that, under PJM's existing rules, resource adequacy is being met currently and will continue to be met into the foreseeable future.

145. Exelon argues that, currently, prices are low (benefitting consumers), while new entry is robust, confirming that PJM's capacity market continues to attract investment. Exelon asserts that, under these circumstances, rule changes designed to raise prices would not be just and reasonable. Exelon adds that ZECs programs have been understood and factored into the market for some time and that if they were undermining resource adequacy, or investor confidence, the data would (but does not) show it. Exelon further asserts that PJM's market is sufficiently designed to maintain equilibrium and safeguard resource adequacy across a broad range of conditions. Exelon notes, for example, that if state programs reduce capacity prices, but tightening supply indicates that new entry is needed, prices will rise and the downward sloping demand curve will ensure that the capacity price adjusts to reflect the costs of generators that are necessary for resource adequacy.

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[269] *Id.* at 25-26.

[270] ODEC Comments at 5.

146. The New Jersey Board argues that PJM has failed to demonstrate how New Jersey's generation-resource policies, including its ZECs initiative or offshore wind program, have undermined PJM's wholesales markets. The New Jersey Board further characterizes PJM's claims regarding price suppression as speculative.

147. Intervenors also dispute PJM's claim that action is required in this proceeding because state procurement choices have negative spillover effects on other states. Clean Energy Advocates argue PJM's claim is unsupported. Clean Energy Advocates add that, regardless, the logic of PJM's position is flawed because it could be used to justify action to adjust for *any* type of state regulation. Clean Energy Advocate further note that state policies providing additional compensation to generators benefit, rather than harm, customers in other states by reducing harmful emissions.[271]

148. The Maryland Commission agrees that PJM's spillover claim is unsupported and that none of the states alleged to be affected have filed complaints against their neighboring states. The Maryland Commission adds that entities participating in PJM's FRR option are subject to cost-based rates and are thus insulated from any prospect of retirement as a result of policies in neighboring states.[272]

### C. **Commission Determination**

149. Acting on the records of the Calpine Complaint proceeding and the PJM section 205 filing, we find that PJM's existing Tariff is unjust and unreasonable. The records in both cases demonstrate that states have provided or required meaningful out-of-market support to resources in the current PJM capacity market, and that such support is projected to increase substantially in the future. These subsidies allow resources to suppress capacity market clearing prices, rendering the rate unjust and unreasonable.[273]

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[271] Clean Energy Advocates Protest at 42-45.

[272] Maryland Commission Protest at 8-9.

[273] We find that we can make these findings relying, in part, on the record in PJM's section 205 filing given the Commission's ability to "transform" section 205 filings into section 206 proceedings as long as the Commission observes the constraints imposed under section 206. PJM's filing in Docket Nos. ER18-1314-000, *et al.* specifically raised the issue of whether the existing Tariff was adequate and put into the record evidence showing its deficiencies. The intervening parties also filed extensive comments addressing the justness and reasonableness of the existing Tariff. *See Western Resources*, 9 F.3d at 1579 ("Under the NGA, an action may originate as a § 4 proceeding

We therefore grant Calpine's Complaint, in part, but reject Calpine's proposed Tariff revisions, even as an interim remedy. In addition, we also are *sua sponte* instituting a section 206 proceeding that incorporates the record of Docket Nos. ER18-1314-000, *et al.*[274] consolidating this new proceeding with the Calpine Complaint, and establishing paper hearing procedures for the consolidated proceedings regarding the just and reasonable replacement rate.

**1. PJM's Existing Tariff**

150. We find, based on the evidence in Docket Nos. EL16-49-000 and ER18-1314-000, *et al.*, that PJM's existing Tariff is unjust and unreasonable and unduly discriminatory. It fails to protect the integrity of competition in the wholesale capacity market against unreasonable price distortions and cost shifts caused by out-of-market support to keep

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[parallel to FPA section 205] only to be transformed later into a § 5 [parallel to FPA section 206] proceeding)*; PSCNY*, 866 F.2d at 491 ("[W]here a § 4 [parallel to FPA section 205] proceeding is under way, the Commission may discover facts that persuade it that reductions or changes are appropriate that require the exercise of its § 5 [parallel to FPA section 206] powers); *Tennessee Gas Pipeline v. FERC*, 860 F.2d 446, 456 (D.C. Cir. 1988) ("'If, in the course of a section 4 proceeding, FERC decides to take action authorized by section 5, the Commission may do so without initiating an independent proceeding. But section 5 authority, regardless of the context in which it is exercised, may be pursued only in accordance with the requirements and constraints imposed by section 5."). *See generally*, *NRG*, 862 F.3d at 114 n.2 ("FERC may unilaterally impose a new rate scheme on a utility or Regional Transmission Organization only under a different provision of the Act: Section 206 [citation omitted]. Section 206 requires FERC to demonstrate that the existing rates are 'entirely outside the zone of reasonableness' before FERC imposes a new rate without the consent of the utility or Regional Transmission Organization that filed the proposal.").

[274] *See Monongahela*, 162 FERC ¶ 61,129 at P 71 (combining the records of section 206 and section 205 proceeding, finding the proposed section 205 filing unjust and unreasonable, the existing tariff unjust and unreasonable, and determining the just and reasonable replacement rate); *Western Resources*, 9 F.3d at 1579 ("Under the NGA, an action may originate as a § 4 proceeding [parallel to FPA section 205] only to be transformed later into a § 5 [parallel to FPA section 206] proceeding). *See generally, AEMA*, 860 F.3d at 664 (affirming the Commission's revision of provisions under section 206 when the acceptance of a section 205 filing rendered these other provisions unjust and unreasonable).

existing uneconomic resources in operation, or to support the uneconomic entry of new resources, regardless of the generation type or quantity of the resources supported by such out-of-market support. The resulting price distortions compromise the capacity market's integrity. In addition, these price distortions create significant uncertainty, which may further compromise the market, because investors cannot predict whether their capital will be competing against resources that are offering into the market based on actual costs or on state subsidies. Ultimately, these problems with PJM's existing Tariff result in unjust and unreasonable rates, terms, and conditions of service. While the Commission in 2011 accepted PJM's proposal for a MOPR limited to new natural gas-fired resources,[275] the evidence put forward by PJM and the intervenors demonstrate that the price-distorting effects on wholesale capacity prices caused by resources that receive out-of-market support reach far beyond new natural gas-fired resources.[276]

151. As Calpine points out, out-of-market support for resources other than natural gas-fired resources has been increasing.[277] PJM, in its filing in Docket Nos. ER18-1314-000, *et al.* makes a similar showing. These out-of-market programs include laws passed in a number of PJM states that provide or require out-of-market support for nuclear, solar, and wind resources.[278] The data provided by PJM shows that various state programs currently in existence contemplate, for example, supporting 4,760 MW of nuclear

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[275] 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 37. PJM revised the MOPR in 2013, still limiting the MOPR to natural gas resources but expanding it in other ways to respond to changed circumstances. The Court of Appeals for the District of Columbia Circuit reversed and remanded that determination, *NRG*, 862 F.3d at 117, and, on remand, the Commission rejected the filing. NRG Remand Order, 161 FERC ¶ 61,252.

[276] Indeed, as the history of the PJM MOPR shows, both PJM and the Commission have had to reevaluate the extent of the MOPR in light of changing circumstances. The original MOPR in 2006, for example, did not address state out-of-market support, and the Commission accepted PJM's filing in 2011 to address that. PJM again sought to revise its MOPR in light of circumstances in 2013.

[277] *See* Amended Complaint at 7 (noting the Illinois ZEC Program). *See generally id.* at 11, n.46 (citing *Order Adopting a Clean Energy Standard*, Case Nos. 15-E-0302 and 16-E-0270 (N.Y.P.S.C. Aug. 1, 2016)).

[278] *See, e.g.*, NJ Senate Bill 2313, 2018-19 Legislative Session; Illinois 99th Gen. Assemb. S.B. 2814 (Dec. 7, 2016).

generation.[279] In addition, PJM cites to Maryland and New Jersey programs that authorize, together, 1,350 MWs of off-shore wind procurement. As noted above, PJM also estimates that nearly 5,000 MW of renewable energy capacity are needed in 2018 to generate the RPS requirements for energy in the PJM region.[280] The record shows that out-of-market support to existing resources is significant enough to affect the price in the market, and therefore the entry and exit of resources. As Dr. Giacomoni points out:

> [T]he Illinois ZEC program equates to a subsidy of $265/MW-day. By comparison, the most recent Base Residual Auction clearing price for the ComEd [Locational Deliverability Area] in PJM's capacity market was $188/MW-day. Similarly, REC payments to onshore wind in New Jersey equate to a subsidy of $250/MW-day, while those to onshore wind in Delaware equate to a subsidy of $253/MW-day, both well above the clearing price of $188/MW-day in the EMAAC [Locational Deliverability Area].[281]

Thus, out-of-market support to existing resources may allow even uncompetitive resources, for whom a competitive offer would be significantly higher than zero, to submit low or zero priced offers into the capacity market.

152. In addition to these current payments, PJM provides data showing that existing state RPS programs will continue to require significant support in the future, such that PJM estimates that over 8,000 MW of RPS capacity will be needed to meet these requirements by 2025.[282] The affidavit of Dr. Anthony Giacomoni provides further detail as to this projected growth. For example, the affidavit shows that, by 2033, Illinois, Maryland, and Delaware will each procure 25 percent of their capacity requirements through their RPS programs, and the District of Columbia will procure 50 percent through its RPS program.[283] Dr. Giacomoni further shows that this increasing out-of-

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[279] *See* Filing at Attach. F (Aff. of Dr. Anthony Giacomoni at 9 and Attach. 1).

[280] *Id.*

[281] *Id.* at 10-11.

[282] *Id.*

[283] *Id.*

market support to non-natural gas-fired resources will significantly affect the PJM capacity market.[284]

153. We recognize that the Commission has previously declined to extend the MOPR to existing resources, finding that a competitive offer for an existing resource would "typically be very low, and often close to zero—regardless of whether the resource receives any out-of-market payments."[285] However, we find that circumstances in PJM have changed. First, many of the programs of current concern in PJM's filing, such as the ZEC program payments, apply only to resources that would not have been subject to PJM's current MOPR, even if they had been new. Second, although we continue to recognize that a competitive offer for existing resources may be low, this is not always true, especially with respect to older resources that need to incur significant maintenance or refurbishment expenses to remain operational. Out-of-market support to existing resources has proliferated in recent years, which increases the ability of even uncompetitive existing resources, for whom a competitive offer would be significantly higher than zero, to submit offers into the PJM capacity market that do not reflect their actual costs. While this was always theoretically possible, there is an important difference between a resource that offers low as a result of competition in the market and one that offers low because a state subsidy gives it the luxury of doing so. The state subsidy protects the latter resource from the potential downside of that bidding behavior. Thus, we find here that the increase in programs providing out-of-market support, such as ZEC programs, has changed the circumstances in PJM, such that it is no longer possible to distinguish the treatment of new and existing resources in the context of PJM's MOPR.

154. Specifically, we note that older, uneconomic resources in PJM, which may not be able to clear the market based on their costs alone, are increasingly receiving out-of-market support to allow them to remain in the market. We agree with PJM that retaining resources that the market does not regard as economic suppresses prices.[286] These resources, which should consider retiring, based on their costs, are able to displace resources that can meet PJM's capacity needs at a lower overall cost. In addition, the

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[284] *Id.* at 10 and Attach. 2.

[285] 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 132. *N.Y. Indep. Sys. Operator, Inc.*, 122 FERC ¶ 61,211, at P 118, *order on reh'g*, 124 FERC ¶ 61,301 (2008), *order on reh'g,* 131 FERC ¶ 61,170 (2010), *order on reh'g*, 150 FERC ¶ 61,208 (2015).

[286] *See* PJM Filing at 19.

level of the out-of-market support payment in PJM, which PJM explains often exceeds PJM's recent capacity market clearing prices, is high enough to significantly affect whether a resource receiving such support chooses to remain in operation. Therefore, we find that PJM's Tariff is unjust and unreasonable because PJM's MOPR does not address subsidies to existing resources.

155. Similarly, we also find based on the changed circumstances described above that limiting PJM's MOPR to new natural gas-fired resources is no longer just and reasonable. The Commission previously found, in the 2011 PJM MOPR Order, that new natural gas-fired resources were not similarly situated relative to other new entrants because natural gas-fired resources have the shortest development time, and "thus are more efficient resources to suppress capacity prices."[287] Thus, the current Tariff reflects the need to protect the market from the exercise of buyer-side market power through the construction of a natural gas-fired resource on a short timeframe. While these resources still have low construction costs and short development times, we find that, regardless of whether they are the most efficient resources to suppress capacity prices in PJM, they are not the only resources likely or able to suppress capacity prices. As PJM explains in its filing, states in the PJM region have been increasingly supporting specific resources or resource types. Price suppression stemming from state choices to support certain resources or resource types is indistinguishable from that triggered through the exercise of buyer-side market power. Under these circumstances, we no longer can assume that there is any substantive difference among the types of resources participating in PJM's capacity market with the benefit of out-of-market support. The Commission has previously recognized that resources receiving out-of-market support are capable of suppressing market prices, regardless of intent.[288] We reiterate that finding here.

156. For the foregoing reasons, we find, based on this record, that the PJM Tariff allows resources receiving out-of-market support to significantly affect capacity prices in a manner that will cause unjust and unreasonable and unduly discriminatory rates in PJM regardless of the intent motivating the support.[289] We are compelled by the evidence presented by PJM, Calpine, and other parties to these consolidated proceedings to conclude that out-of-market payments by certain PJM states have reached a level sufficient to significantly impact the capacity market clearing prices and the integrity of the resulting price signals on which investors and consumers rely to guide the orderly entry and exit of capacity resources. We cannot rely on such a construct to harness

[287] 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 153.

[288] *See* 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at PP 170-71.

[289] *Id*.

competitive market forces and produce just and reasonable rates. The PJM Tariff, therefore, is unjust and unreasonable.

### 2. Replacement Rate

157. Although we have found that PJM's existing MOPR renders the Tariff unjust and unreasonable, we are not able, based on the existing record in Docket Nos. EL16-49-000 and ER18-1314-000, *et al.*, to make a final determination regarding the just and reasonable replacement rate for the PJM Tariff. However, we preliminarily find that modifying two aspects of the PJM Tariff may produce a just and reasonable rate. As explained below, PJM should expand the MOPR for those resources seeking to participate in the capacity auction and implement a resource-specific FRR Alternative option, under which a resource receiving out-of-market support may remain on the system, outside of the capacity market. In order to supplement the record and enable the Commission to make its determination on a just and reasonable replacement rate, the Commission is consolidating Docket Nos. EL16-49-000 and ER18-1314-000, *et al.*, and initiating a paper hearing in which the parties may submit additional arguments and evidence to address these requirements.

158. As noted above, there are two aspects to our proposed replacement rate. First, based on our finding that neither the existing MOPR nor the MOPR-Ex proposal provides a just and reasonable means of addressing the market impacts of out-of-market payments, we propose that the replacement rate include an expanded MOPR that covers out-of-market support to all new and existing resources, regardless of resource type. Consistent with the Commission's findings in past MOPR proceedings, the concerns raised in PJM's section 205 filing and the Calpine Complaint demonstrate that state-subsidized resources—not just entities exercising buyer-side market power—can cause significant price suppression. An expanded MOPR, with few or no exceptions, should protect PJM's capacity market from the price suppressive effects of resources receiving out-of-market support by ensuring that such resources are not able to offer below a competitive price. We emphasize that an expanded MOPR in no way divests the states in the PJM region of their jurisdiction over generation facilities. States may continue to support their preferred types of resources in pursuit of state policy goals. At the same time, we have exclusive jurisdiction over the wholesale rates of both subsidized and unsubsidized resources, and a statutory obligation to ensure they are just and reasonable.[290] Expanding the MOPR to apply to state-subsidized resources will help ensure that the rates for the unsubsidized resources in the capacity market are the result of competitive market forces, and therefore are just and reasonable.

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[290] *See Connecticut PUC*, 569 F.3d at 481.

159. We recognize that, if PJM's MOPR applies to state subsidized resources with few or no exceptions, and yet the states continue to support those resources, some ratepayers may be obligated to pay for capacity both through the state programs providing out-of-market support and through the capacity market. The courts have directly addressed this point, holding that states "are free to make their own decisions regarding how to satisfy their capacity needs, but they 'will appropriately bear the costs of [those] decision[s],' . . . including possibly having to pay twice for capacity."[291] Nonetheless, we do not take this concern—or the states' right to pursue valid policy goals—lightly. Which brings us to the second aspect of our proposed replacement rate.

160. In addition to expanding PJM's MOPR, we also preliminarily find that it may be just and reasonable to accommodate resources that receive out-of-market support, and mitigate or avoid the potential for double payment and over procurement, by implementing a resource-specific FRR Alternative option. We therefore propose that PJM adapt its current FRR option to allow, on a resource-specific basis, resources receiving out-of-market support to choose to be removed from the PJM capacity market, along with a commensurate amount of load, for some period of time. The resource-specific FRR Alternative would accommodate such resources by allowing them to remain on the system, despite their inability to compete in the capacity market based on their costs, by permitting them to exit the capacity market with a commensurate amount of load and operating reserves (we seek comment on the best method of accounting for both the load and reserves, below). Resources and load that take advantage of this new resource-specific FRR Alternative would not participate in the PJM capacity market, and would neither make nor receive payments from that capacity market. However, those resources and their associated load would continue to participate in the energy and ancillary services market, as is the case under the current FRR construct. Unlike the current FRR construct, the resource-specific version would not require a load-serving entity to remove its entire footprint from the capacity market; rather it would remove a specific resource (and accompanying load). However, we note that we are not proposing that PJM remove the existing FRR construct, which allows load-serving entities to exit the capacity market on a utility-wide basis.

161. A resource receiving out-of-market support would not be prohibited from participating in the capacity market, but would be subject to the expanded MOPR, should it choose to offer into the market. In this manner, the resource-specific FRR Alternative would accommodate policies to provide out-of-market support to certain resources, but remove those resources from the market. This would essentially create a bifurcated capacity construct – resources receiving out-of-market support and a commensurate

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[291] *Id.* at 97 (citing *Connecticut PUC*, 569 F.3d at 481).

amount of load would be outside of the PJM capacity market, thereby increasing the integrity of the PJM capacity market for competitive resources and load.

162. In addition to increasing the integrity of the capacity market and allowing resources that receive out-of-market support to remain in PJM's energy and ancillary services markets, and continue to be recognized as capacity on the system, we expect this bifurcated approach to provide significant benefits through increased transparency for investors, consumers, and policymakers. Though the capacity market side of the bifurcated capacity construct will be relatively smaller, the expanded PJM MOPR will ensure that all resources participating in the capacity market, whether or not these resources receive out-of-market support, offer competitively. Further, the bifurcated capacity construct should make more transparent which capacity costs are the result of competition in the capacity market and which capacity costs are being incurred as a result of state policy decisions. Finally, depending on how load is selected for the new resource-specific FRR Alternative, this capacity construct should help confine the cost of a particular state policy decision to consumers within the state that made that policy decision, whereas the status quo requires consumers in some PJM states to subsidize the policy decisions of other PJM states.

163. By its failure to address, or to provide for any effective means of addressing, the impact of out-of-market support, the existing Tariff is resulting, within states, in a forewarned scenario that has been referred to as "unplanned reregulation,"[292] one subsidy and mandate at a time. Although FERC policies by design have relied, for their production of just and reasonable wholesale power rates, on competitive processes and markets, the states, should they so choose, undeniably have the power simply to reregulate — i.e., to revert to an era and regulatory model in which "competition among utilities was not prevalent."[293] The replacement rate construct proposed in this order will not interfere with the states' ability to choose the path of re-regulation, whether via a conscious policy decision or a simple failure to take steps to prevent reregulation as described on an unplanned basis. Rather, the construct will provide the information that states and all other stakeholders will need in order to make informed decisions about the

[292] CASPR Order, 162 FERC ¶ 61,205, at 62,098 (LaFleur, Comm'r, concurring).

[293] *See Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361, 1363 (D.C. Cir. 2004) (quoting *New York v. FERC*, 535 U.S. 1, 5 (2002)) (internal quotations and alteration omitted); *see also id.* (describing the era of vertically integrated monopolies as "the bad old days"); *Wisc. Pub. Power, Inc. v. FERC*, 493 F.3d 239, 246 (D.C. Cir. 2007) (same); *Exxon Mobil Corp. v. FERC*, 571 F.3d 1208, 1212 (D.C. Cir. 2009) (same).

degree to which they prefer to rely on the capacity market versus out-of-market mechanisms, and it will manage the results of those decisions in an orderly fashion.

164. We acknowledge that there are a number of details that would need to be addressed to implement this resource-specific FRR Alternative, and the Commission requests that these topics be addressed in the paper hearing. In addition to addressing the two overarching components of the bifurcated capacity construct described above, the parties should address the following issues in the paper hearing:

165. The appropriate scope of out-of-market support to be mitigated by the expanded MOPR, thereby rendering a resource eligible for the new resource-specific FRR Alternative.[294] Also, for units that choose the resource-specific FRR Alternative and need to cover their Avoidable Cost Rate outside of the capacity market, how should the Tariff address that need both procedurally and substantively?

166. How to identify the load that will be removed from the PJM capacity market auction in connection with resource owners choosing the resource-specific FRR Alternative. This is an important issue because the load associated with each such resource will not have an obligation to purchase capacity from the auction. In addition,

[294] In Docket Nos. ER18-1314-000, *et al.*, PJM proposed to define Material Subsidies as "material payments, concessions, rebates, or subsidies directly or indirectly from any governmental entity connected to the construction, development, operation, or clearing in [the Base Residual] Auction, of the Capacity Resource, or other material support or payments obtained in any state-sponsored or state-mandated processes, connected to the construction, development, operation, or clearing in any [Base Residual] Auction, of the Capacity Resource." As proposed by PJM, this would not include:

> payments (including payments in lieu of taxes), concessions, rebates, subsidies, or incentives designed to incent, or participation in a program, contract or other arrangement that utilizes criteria designed to incent or promote, general industrial development in an area;
>
> payments, concessions, rebates, subsidies or incentives designed to incent, or participation in a program, contract or other arrangements from a county or other local governmental authority using eligibility or selection criteria designed to incent, siting facilities in that county or locality rather than another county or locality; or
>
> federal government production tax credits, investment tax credits, and similar tax advantages or incentives that are available to generators without regard to the geographic location of the generation. PJM Filing at 69-70.

we request comments on whether part of a resource should be eligible for the new resource-specific FRR Alternative, as well as how to address resources with split ownership.

167. As discussed above, the proposed replacement rate would expand the MOPR to new and existing resources receiving out-of-market support with few to no exemptions. We request comment on the types of MOPR exemptions that should be included. For example, should an exemption be included for self-supplied resources used to meet loads of public power entities? Alternatively, should those resources have the option to use the resource-specific FRR Alternative? What, if any, exceptions should be added to the MOPR for existing resources in the capacity auction?.

168. Another issue is the length of time resources receiving out-of-market support who chose the resource-specific FRR Alternative must remain outside of the PJM capacity market auction and the mechanism by which such resources can return to the auction. One possibility is that a resource choosing the resource-specific FRR Alternative would be required to continue as an FRR resource for the duration of its out-of-market support. However, there may be factors favoring a longer period, or perhaps a fixed period of time such as five years.

169. Additionally, we request comment on how the resource-specific FRR Alternative would accommodate required reserves for the load pulled from the PJM capacity market, as well as whether any changes to the demand curve would be necessary to accommodate the resource-specific FRR Alternative. We also seek comment on the best approach to ensure locational resource adequacy needs are met after removing load and resources from the capacity market under the FRR Alternative. Finally, we seek comment on whether the existing Capacity Performance construct for FRR resources can be applied to a resource-specific FRR Alternative.

170. The Commission recognizes that, as with any market design, there is some degree of uncertainty concerning how this new bifurcated capacity construct will function in practice, and how the departure of state-subsidized resources might impact capacity market prices. If there are scenarios in which the FRR Alternative could affect the competitiveness of the capacity market clearing prices, parties should explain those scenarios in the paper hearing. In addition, we note that other significant changes to PJM's capacity market have employed mechanisms to transition to the new construct.[295]

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[295] *See PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 253 (2015).

We seek comment on whether any such mechanisms or other accommodations would be necessary here to facilitate the transition to this new capacity construct.

171. Finally, some intervenors raise the question of whether federal sources of out-of-market support should be addressed by Commission action, and others question how major capacity market reforms will interact with PJM's ongoing fuel security initiative.[296] Parties should also consider these questions in their comments, as well as whether to incorporate the administratively determined minimum offer prices from PJM's MOPR-Ex proposal or to establish different minimum offer prices.

172. As noted, the Commission is initiating a paper hearing to address the just and reasonable replacement rate for PJM's existing MOPR, including the proposal identified above or any other proposal that may be presented. Interested parties are invited to submit their initial round of testimony, evidence, and/or argument within 60 days of the date of this order. Reply testimony, evidence, and/or argument may be submitted 30 days thereafter (or 90 days from the date of this order). Following the close of the record, the Commission will make every effort to issue an order establishing the just and reasonable replacement rate no later than January 4, 2019, the date requested by PJM in its filing in Docket Nos. ER18-1314-000, *et al*.

173. We recognize that modifying the PJM capacity market as discussed herein would be a significant undertaking and that the next Base Residual Auction is scheduled to occur in May 2019. Accordingly, we note that PJM may file requests for waiver or other relief, as appropriate.[297]

174. Section 206(b) of the FPA provides that upon the filing of a complaint, the Commission must establish a refund effective date that is no earlier than the date of the complaint and no later than five months subsequent to the date of the complaint. In addition, where, as here, the Commission is also instituting a section 206 investigation on its own motion, section 206(b) of the FPA requires that the Commission establish a refund effective date that is no earlier than the date of publication by the Commission of notice of its intention to initiate such proceeding nor later than five months after the publication date. In order to give maximum protection to customers, and consistent with

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[296] *See, e.g.*, Ohio Consumers Counsel Protest at 7-9; AEP Comments at 2-3; Buyers Group Comments at 6-7.

[297] *See, e.g.*, *PJM Interconnection, L.L.C*, 151 FERC ¶ 61,067 (2015) (granting PJM's request to delay PJM's 2015 Base Residual Auction for the 2017-18 delivery year while the Commission was evaluating PJM's Capacity Performance proposal).

our precedent, we have historically tended to establish the section 206 refund effective date at the earliest date allowed by section 206**,** and we do so here as well.[298] In Docket No. EL16-49-000, that date is March 21, 2016, the date Calpine filed the Calpine Complaint. In Docket No. EL18-178-000, that date is the date of publication of notice of initiation of the section 206 proceeding in Docket No. EL18-178-000 in the Federal Register**.**

175. Section 206(b) of the FPA also requires that, if no final decision is rendered by the conclusion of the 180-day period commencing upon initiation of the section 206 proceeding, the Commission shall state the reason why it has failed to render such a decision and state its best estimate as to when it reasonably expects to make such a decision. As we are setting the section 206 proceeding in Docket No. EL18-178-000 for further proceedings, we expect that we will be able to render a decision prior to January 4, 2019.

The Commission orders:

(A) PJM's filing, in Docket Nos. ER18-1314-000, *et al.* is hereby rejected, as discussed in the body of this order.

(B) Calpine's Complaint, in Docket No. EL16-49-000, is hereby granted in part, and denied in part, as discussed in the body of this order.

(C) Pursuant to the authority contained in and subject to the jurisdiction conferred upon the Commission by section 402(a) of the Department of Energy Organization Act and by the FPA, particularly section 206 thereof, and pursuant to the Commission's Rules of Practice and Procedure and the regulations under the FPA (18 C.F.R., Chapter 1), the Commission hereby institutes a proceeding in Docket No. EL18-178-000, as discussed in the body of this order. The record in Docket Nos. ER18-1314-000, *et al.* is hereby incorporated into Docket No. EL18-178-000, and that docket is consolidated with Docket No. EL16-49-000.

(D) The Secretary shall promptly publish in the *Federal Register* a notice of the Commission's initiation of section 206 proceedings in Docket No. EL18-178-000.

(E) The refund effective date in Docket No. EL16-49-000, established pursuant to section 206(b) of the FPA, is March 21, 2016, the date Calpine filed the Complaint.

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[298] *See, e.g.*, *Idaho Power Co.*, 145 FERC ¶ 61,122 (2013); *Canal Elec. Co.*, 46 FERC ¶ 61,153, *order on reh'g*, 47 FERC ¶ 61,275 (1989).

The refund effective date in Docket No. EL18-178-000 will be the date of publication in the *Federal Register* of the notice discussed in Ordering Paragraph (C) above.

(F) A paper hearing will be conducted in consolidated Docket Nos. EL18-178-000 and EL16-49-000. The parties to these proceedings are hereby invited to submit an initial round of testimony, evidence, and/or argument within 60 days of the date of this order. Reply testimony, evidence, and/or argument should be submitted 30 days thereafter, or 90 days from the date of this order, as discussed in the body to this order.

By the Commission. Commissioners LaFleur and Glick are dissenting with separate statements attached.
Commissioner Powelson is concurring with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix 1

**<u>Intervenors in Docket No. EL16-49-000</u>**

American Electric Power Service Corporation (AEP)[+]
American Municipal Power, Inc. (Load Group)[+]
American Petroleum Institute
American Public Power Association (Load Group)[+]
American Wind Energy Association (AWEA)*[+]
Buckeye Power, Inc.
CPV Power Holdings, LP
Delaware Public Service Commission
Direct Energy Business, LLC (Direct Energy)[+]
Dominion Resources Services, Inc. (Load Group)[+]
Duke Energy Corporation
East Kentucky Power Cooperative, Inc. (EKPC, or Dayton/EKPC/FirstEnergy)[+]
EDF Renewable Energy, Inc. (EDF Renewable) *
Electricity Consumers Resource Council
Electric Power Supply Association (EPSA)[+]
Environmental Defense Fund (EDF, or Environmental Coalition)[+]
Exelon Corporation (Exelon)[+]
FirstEnergy Service Company (FirstEnergy, or Dayton/EKPC/FirstEnergy)[+]
Illinois Attorney General[+]
Illinois Citizens Utility Board
Illinois Commerce Commission (Illinois Commission)[+]
Illinois Industrial Energy Consumers
Illinois Municipal Electric Agency
Industrial Energy Users-Ohio
Invenergy Thermal LLC and Invenergy Wind LLC
Kentucky Office of the Attorney General (Kentucky AG)*[+]
LS Power Associates, L.P.
Maryland Office of People's Counsel
Maryland Public Service Commission[+]
Michigan Agency for Energy
Michigan Public Service Commission
Monitoring Analytics, LLC, acting as the Independent Market Monitor for PJM (Market Monitor)[+]
National Rural Electric Cooperative Association (NRECA)[+]
Natural Gas Supply Association (NGSA)[+]
New England Power Pool Participants Committee (NEPOOL Participants Committee)[+]
New England States Committee on Electricity
New Jersey Board of Public Utilities

New Jersey Division of Rate Counsel
NextEra Energy Resources
North Carolina Electric Membership Corporation
Nuclear Energy Institute (NEI)+
Nucor Steel Marion
Office of the Ohio Consumers Council (Consumers' Counsel)+
Ohio Energy Group (OEG)+
Ohio Environmental Council
Old Dominion Electric Cooperative (Load Group)+
Pennsylvania Public Utility Commission (Pennsylvania Commission)+
PJM Industrial Customer Coalition (Load Group)+
PJM Power Providers Group
PPL Electric Utilities Corporation
PSEG Companies (PSEG)+
Public Citizen, Inc.
Public Power Association of New Jersey (Load Group)+
Public Utilities Commission of Ohio (Ohio Commission)+
Retail Energy Supply Association
Rockland Capital, LLC (Rockland)+
Shell Energy North America (U.S.), LP
Southern Maryland Electric Cooperative, Inc.
Steel Producers
Sustainable FERC Project (Environmental Coalition)
Talen Energy Marketing, LLC, *et al*. (Talen)*+
The Dayton Power and Light Company (Dayton, or Dayton/EKPC/FirstEnergy)+
U.W.U.A. Local 457 (Local 457)*

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* late intervention
\+ comments/protest

Appendix 2

**Intervenors in Docket Nos. ER18-1314-000, *et al.***

Advanced Energy Economy * (CEIA)
Advanced Energy Management Alliance
Affirmed Energy LLC
Ameren Services, Co.
American Council on Renewable Energy # (CEIA)
American Electric Power Service Corporation * (AEP)
American Municipal Power, Inc. * (AMP)
American Public Power Association * (APPA)
American Wind Energy Association # (AWEA; CEIA)
Avangrid Renewables, LLC * (Avangrid)
Buckeye Power, Inc.
Calpine Corporation
Capitol Power Corporation
CPV Power Holdings, LP
Dayton Power and Light Company * (Dayton)
Delaware Division of the Public Advocate
Delaware Public Service Commission
Direct Energy, *et al.* * (Joint Commenters)
Dominion Energy Services, Inc. * (Dominion)
Duke Energy Corporation * (Duke)
Duquesne Light Company * (Duquesne)
East Kentucky Power Cooperative, Inc. * (First/Energy/EKPC)
Eastern Generation, LLC (Eastern Generation) #
EDF Renewables, Inc.
Edison Electric Institute
EDP Renewables North America LLC
Electric Power Supply Association * (EPSA)
Enerwise Global Technologies, Inc.
Environmental Defense Fund * (Clean Energy Advocates)
Exelon Corporation * (Exelon)
FirstEnergy Service Company * (FirstEnergy/EKPC)
Illinois Attorney General
Illinois Citizens Utility Board, on behalf of itself and individual Illinois consumers
Illinois Commerce Commission * (Illinois Commission)
Illinois Municipal Electric Agency * (IMEA)
Indiana Office of Consumer Counselor
Institute for Policy Integrity, NYU School of Law * (NYU)

J-Power USA Development Co., Ltd. * (API/J-Power/Panda)
Kentucky Attorney General
LS Power Associates, L.P. * (LS Power)
Maryland Office of People's Counsel * (Consumers Coalition)
Maryland Public Service Commission * (Maryland Commission)
Monitoring Analytics, LLC, serving as PJM's
Independent Market Monitor * (Market Monitor)
National Rural Electric Cooperative Association * (NRECA)
Natural Gas Supply Association * (NGSA)
Natural Resources Defense Council * (Clean Energy Advocates)
New Jersey Board of Public Utilities * (New Jersey Board)
New Jersey Division of Rate Counsel * (Consumer Coalition)
New York Public Service Commission *
North Carolina Electric Membership Corporation
Northern Virginia Electric Cooperative * (NOVEC)
NRG Power Marketing LLC and GenOn Energy
Management, LLC * (NRG)
Nuclear Energy Institute * (NEI)
Office of the Ohio Consumers Counsel * (Ohio Consumers Counsel)
Office of the People's Counsel for the
District of Columbia * (Consumers Coalition)
Old Dominion Electric Cooperative * (ODEC)
Organization of PJM States, Inc. * (OPSI)
Panda Power Generation Infrastructure Fund, LLC * (API/J-Power/Panda)
Pennsylvania Public Utility Commission * (Pennsylvania Commission)
PJM Industrial Customer Coalition * (PJM-ICC)
PJM Power Providers Group * (P3)
PPL Electric Utilities Corporation
PSEG Companies * (PSEG)
Public Citizen, Inc.
Public Service Commission of West Virginia
Public Utilities Commission of Ohio * (Ohio Commission)
Rockland Capital, LLC * (Rockland)
Shell Energy North America (U.S.), L.P. # (Shell)
Sierra Club * (Clean Energy Advocates)
Solar RTO Coalition * (Solar Coalition)
Southern Maryland Electric Cooperative, Inc. * (SMECO)
Starwood Energy Group Global, L.L.C. * (Joint Commenters)
Sustainable FERC Project, *et al.* * (Clean Energy Advocates)
Talen Energy Marketing, LLC, *et al.* * (Talen)
Union of Concerned Scientists
Vistra Energy Corp. * (Vistra)

Wabash Valley Power Association, Inc.
West Virginia Consumer Advocate

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* intervenors submitting protests or comments
\# motions to intervene out-of-time

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC<br><br>v.<br><br>PJM Interconnection, L.L.C. | Docket Nos. EL16-49-000 |
| PJM Interconnection, L.L.C. | ER18-1314-000<br>ER18-1314-001 |
| PJM Interconnection, L.L.C. | EL18-178-000<br>(Consolidated) |

(Issued June 29, 2018)

LaFLEUR, Commissioner *dissenting*:

In today's order, the Commission rejects two proposals from PJM Interconnection, L.L.C. (PJM) to modify its capacity market to address the impact of state policies. As discussed below, rather than reject the second of PJM's proposals, MOPR-Ex, I would provide guidance to PJM and its stakeholders to further refine that concept as a workable market reform. I write separately primarily to explain my disagreement with the Commission's companion decision to find the PJM capacity market unjust and unreasonable and pursue a significant overhaul of that market without adequate stakeholder engagement, particularly with the states.

Addressing the tension between relying on wholesale capacity markets to attract investment and state policies to support specific resources has been a longstanding priority of mine. As I have stated many times, I believe tailored regional solutions are likely to provide the best path forward in each region, and I have actively worked with regions where possible to help guide and develop those solutions. The Commission's recent approval of ISO New England, Inc.'s Competitive Auctions with Sponsored Policy

Resources (CASPR) proposal[1] is, in my mind, a prime example of how a region can craft a targeted market reform to address this tension and preserve the benefits of the wholesale markets for customers while also facilitating state policies.

As evidenced by today's ruling on the Calpine complaint, filed more than two years ago, this issue is not new to PJM. I recognize that parties in PJM have awaited guidance from the Commission for some time, so I understand and am generally sympathetic to the Commission's desire for action. I am on record that the increasing use of out-of-market compensation to support policy goals in the eastern RTOs/ISOs creates long-term challenges for the viability of wholesale capacity markets. Failure to carefully address these challenges could result in messy, unplanned reregulation, which could threaten reliability while also unnecessarily increasing costs to consumers. It is therefore critical that the Commission stay engaged and help guide the eastern RTOs/ISOs towards regionally-appropriate solutions that address the tension between wholesale capacity markets and state resource selection. I recognize that finding that balance requires difficult decisions and possible trade-offs between competing priorities.

PJM's proposals certainly present the Commission with those difficult decisions, and I appreciate the significant work that went into each proposal. In my view, today's order should have granted PJM's request that the Commission provide guidance to help focus PJM and its stakeholders on a workable solution to the growing use and impact of state subsidies.

First, I agree with the majority's decision to reject PJM's capacity repricing proposal, as I am concerned that it would allow subsidized resources to both cause and benefit from higher capacity market clearing prices. With respect to MOPR-Ex, however, I disagree with the majority's rejection of that proposal, as well as its reasoning. State renewable portfolio standards (RPS) are generally longstanding state programs that often pre-date the capacity market, and are not intended to prop up specific uneconomic units that would otherwise leave the market, but rather to help shape a state's resource mix over time through competitive procurements. As such, I believe that current state RPS programs in PJM are distinguishable from other state support programs that might pose a threat to the viability of the PJM capacity market.

Accordingly, I would have accepted and suspended the MOPR-Ex proposal, and directed further proceedings, including possible settlement discussions, on potential refinements to ensure that MOPR-Ex would not unduly interfere with the operation of

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[1] *ISO New England Inc.*, 162 FERC ¶ 61,205 (2018).

existing state RPS programs.[2] Alternatively, I would have suggested that PJM consider an expanded CASPR-like construct that could include opportunities for new and existing subsidized resources to buy out the capacity obligations of other resources in the market. I think either approach could yield a just and reasonable result.

Instead, today's order rejects PJM's proposals, declares the existing PJM capacity construct unjust and unreasonable, and initiates a paper hearing to consider and flesh out the majority's proposed expansion of PJM's Fixed Resource Requirement (FRR) construct as the just and reasonable solution to the market's alleged flaws. I strongly disagree with this decision.

Let's be clear: through its action today, the majority signals its intent to adopt, through a 90 day paper hearing, the most sweeping changes to the PJM capacity construct since the market's inception more than a decade ago. If ultimately adopted, this proposal would fundamentally rebalance the resource adequacy responsibilities of the states, the Commission, and PJM.

Yet, by declaring the PJM capacity market unjust and unreasonable, the Commission has imposed an *ex parte* restriction on its ability to meaningfully engage with stakeholders outside of formal Commission proceedings, while also creating a timing crisis related to the May 2019 Base Residual Auction (BRA). Today's action therefore creates a direct tension between the Commission's ability to engage with stakeholders and the need to quickly implement major market reforms in time for that auction. This tension could have been alleviated had the Commission chosen a different path, one which I might have been willing to support.[3]

I am particularly troubled that, as a result of today's order, the Commission will be hamstrung in its ability to openly and honestly engage with the states about whether this proposal will meet their needs, and how they might operate under this construct. The

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[2] I note that there is disagreement in the record about whether the MOPR-Ex proposal as filed would interfere with the operation of those RPS programs going forward. *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236, at PP 91, 94 (2018).

[3] For example, the Commission could have rejected PJM's proposals and provided guidance, including directing consideration of an expanded FRR construct. The Commission could also have opened an administrative docket on its proposal and any alternatives, to convene a technical conference and build a record on how the expanded FRR construct might work.

proposed resource-specific FRR Alternative option, however ultimately designed, presents resource owners and states with choices that could be difficult to make in advance of the May 2019 BRA, particularly given that some of the state programs are statutory in nature and could require legislative action to reform.[4] This is too important a decision to be made this quickly, and with this little stakeholder engagement.[5]

With regard to the merits of the expanded FRR construct, I believe that it is an idea worth exploring, and would be open to doing so in conjunction with the other ideas mentioned above. Obviously, today's order will yield a record on this proposal, and I will decide at that time whether it is just and reasonable. However, I do not share the majority's confidence that this proposal is the obvious solution to the challenge before us, in no small part because it is not clear to me how this construct will actually work.

As evidenced by the lengthy list of questions included in the order,[6] the expanded FRR proposal is currently little more than a rough concept, with major design elements left unresolved.[7] The relevant records before the Commission contain virtually no

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[4] *E.g.*, Illinois 99th Gen. Assemb. S.B. 2814 (Dec. 7, 2016).

[5] In fact, prior significant capacity market reforms were the result of months, if not years, of stakeholder engagement. For example, the proposals submitted by PJM were the result of a stakeholder process conducted over more than a year. The CASPR proposal was the subject of several months of stakeholder proceedings, beginning in the summer of 2017, prior to its filing at FERC in January 2018.

[6] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 at PP 159-162, 165-172.

[7] For example, in addition to seeking comment on the high level concept (i.e., a new resource-specific FRR option, coupled with an expanded minimum offer pricing rule for any resource participating in the capacity market that receives out-of-market support), the order highlights the following open issues: (1) what subsidies, including possible federal subsidies, will trigger the revised rules; (2) how to determine which load will be removed from the capacity auction in conjunction with a resource-specific FRR selection, as well as any associated reserve requirements; (3) what MOPR exemptions should be included in this new construct; (4) how to handle potential toggling concerns for resources deciding whether to participate in the capacity market or the new FRR construct; (5) whether a different Capacity Performance construct needs to be developed for resource-specific FRR units; (6) whether the FRR options affect the competitiveness of the capacity market clearing prices; (7) what, if any, transition mechanism might be needed; and (8) what minimum offer price should be used for resources participating in

discussion of an expanded FRR construct, and in conversations with numerous stakeholders prior to PJM submitting its capacity repricing and MOPR-Ex proposals, I do not recall a single meeting in which any entity raised this as a possible solution. Similarly, the expanded FRR construct appears to provide states with a clear option to re-regulate certain generating facilities, and to the extent a state made the decision to transition from the capacity market to state resource selection, the expanded FRR construct could be one possible approach. However, no state in PJM has indicated its desire to re-regulate, a choice that could potentially be forced upon them by this proposal.[8] Given this lack of clarity, today's order injects significant uncertainty into how the PJM capacity construct will work going forward, and therefore how states and market participants should prepare for these transformative changes.

Ultimately, I continue to believe that capacity markets, if properly designed and adapted, can provide meaningful benefits for customers. While I agree that the increase in state subsidies by restructured states does pose a long-term challenge to the capacity markets' ability to deliver those benefits, I am concerned that the desire for action has led the Commission to pursue a flawed and rushed process that could do more harm than good. The majority is proceeding to overhaul the PJM capacity market based on a thinly sketched concept, a troubling act of regulatory hubris that could ultimately hasten, rather than halt, the re-regulation of the PJM market. I would instead follow the "regulatory Hippocratic oath" to first, do no harm, and give PJM and its stakeholders time and direction to address these difficult issues in a sustainable manner.

Accordingly, I respectfully dissent.

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Cheryl A. LaFleur
Commissioner

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the capacity market.

[8] Perversely, the expanded FRR construct could actually *encourage* states to remove preferred resources from the market and instead rely on direct subsidies to support them, as they would receive guaranteed capacity obligations as FRR resources. Given the clean energy targets set by many states, this construct could end up hastening the demise of the capacity markets, rather than preserving them.

UNITED STATES OF AMERICA
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| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC | Docket Nos. EL16-49-000 |
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| PJM Interconnection, L.L.C. | ER18-1314-000 |
| PJM Interconnection, L.L.C. | ER18-1314-001 |
| PJM Interconnection, L.L.C. | EL18-178-000 (Consolidated) |

(Issued June 29, 2018)

GLICK, Commissioner, *dissenting*:

Today, the Commission finds that PJM Interconnection, L.L.C.'s (PJM) Tariff violates the Federal Power Act (FPA) because it fails to "mitigate" state efforts to shape the generation mix. I strongly disagree. The state programs of which the Commission disapproves are precisely the sort of actions that Congress reserved to the states when it enacted the FPA. The Commission's role is not—and should not be—to exercise its authority over wholesale rates in a manner that aims to mitigate, frustrate, or otherwise limit the states' exercise of their exclusive authority over electric generation facilities.

In addition, the Commission entirely fails to meet its burden to show that PJM's Tariff is unjust and unreasonable. The record is devoid of evidence that the states' exercise of their authority is actually interfering with the Commission's responsibility to ensure resource adequacy at just and reasonable rates. To the contrary, PJM's capacity market has resulted in a capacity surplus that is well in excess of the level required to reliably meet the region's electricity demands, suggesting that, if anything, the prices in PJM's capacity market are too high, not too low.[1]

Rather than interfering with state policies that address externalities associated with electric generation, such as greenhouse gas emissions that contribute to the existential threat of climate change, the Commission should be striving to accommodate and give effect to those state initiatives. Although today's order suggests that the Commission seeks to accommodate state policies by creating a new resource-specific Fixed Resource Requirement (FRR) alternative, the Commission fundamentally misunderstands that the state policies that it targets compensate resources for their environmental attributes, not their capacity. As contemplated, the Commission's proposal would effectively force state-sponsored resources out of the capacity market, depriving them of a payment for capacity that they will actually provide and leaving it to the states to pick up that tab.

## I. The Commission Is Interfering with the States' Exclusive Jurisdiction

The FPA is clear that the states, not the Commission, are the entities responsible for shaping the generation mix. Although the FPA provides the Commission with jurisdiction over wholesale sales of electricity as well as rates and practices affecting those wholesale sales, Congress expressly precluded the Commission from regulating "facilities used for the generation of electric energy," instead vesting the states with exclusive jurisdiction over those facilities.[2] It is an inevitable consequence of the FPA's

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[1] Today's order also rejects PJM's two alternative proposals for mitigating the effects of state efforts to shape the generation mix because it finds that PJM failed to demonstrate under section 205 of the FPA, 16 U.S.C. § 824d (2012), that either proposal is just and reasonable and not unduly discriminatory or preferential. I agree with this finding, but largely for the reasons explained in this statement, not those advanced by the Commission.

[2] 16 U.S.C. § 824(b)(1) (2012); *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1292 (2016) (describing the jurisdictional divide set forth in the FPA); *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760, 767 (2016) (*EPSA*) (explaining that "the [FPA] also limits FERC's regulatory reach, and thereby maintains a zone of exclusive state jurisdiction"); *see also Pacific Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 205 (1983) (recognizing that issues including the "[n]eed for new power facilities, their economic feasibility, and rates and services, are areas that have been characteristically governed by the States"). Although these cases deal with the question of preemption, which is, of course, different from the question of whether a rate is just and reasonable under the FPA, the Supreme Court's discussion of the respective roles of the Commission and the states remains instructive when it comes to evaluating

division of jurisdiction over the electricity sector that one sovereign's exercise of its authority will affect matters subject to the other sovereign's exclusive jurisdiction.[3] For example, any state regulation that increases or decreases the number or type of generation facilities will, through the law of supply and demand, inevitably affect wholesale rates. But the existence of such cross-jurisdictional effects is not necessarily a "problem" for the purposes of the FPA. Rather, these cross-jurisdictional effects are the product of the "congressionally designed interplay between state and federal regulation,"[4] at least so long as neither the states nor the Commission exercise their authority in a manner that "targets" or "aims at" the other sovereign's exclusive jurisdiction.[5]

Nevertheless, the Commission now claims that the "integrity and effectiveness" of PJM's capacity market "have become untenably threatened by out-of-market payments provided or required by certain states for the purpose of supporting the entry or continued

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how the application of a minimum offer price rule (MOPR) squares with the Commission's role under the FPA.

[3] *EPSA*, 136 S. Ct. at 776 (explaining that, under the FPA, the federal and state spheres of jurisdiction "are not hermetically sealed from each other"); *see Oneok, Inc. v. Learjet, Inc.*, 135 S. Ct. 1591, 1601 (2015) (explaining that the natural gas sector does not adhere to a "Platonic ideal" of the "clear division between areas of state and federal authority" that undergirds both the FPA and the Natural Gas Act).

[4] *Hughes*, 136 S. Ct. at 1300 (Sotomayor, J., concurring) (quoting *Nw. Cent. Pipeline Corp. v. State Corp. Comm'n of Kan.*, 489 U.S. 493, 518 (1989)); *id.* ("recogniz[ing] the importance of protecting the States' ability to contribute, within their regulatory domain, to the Federal Power Act's goal of ensuring a sustainable supply of efficient and price-effective energy").

[5] *EPSA*, 136 S. Ct. at 776 (emphasizing the importance of "'the *target* at which [a] law *aims*'") (citing *Oneok*, 135 S. Ct. at 1600); *Oneok*, 135 S. Ct. at 1600 (recognizing "the distinction between 'measures *aimed directly at* interstate purchasers and wholesales for resale, and those aimed at' subjects left to the States to regulate") (quoting *N. Nat. Gas Co. v. State Corp. Comm'n of Kan.*, 372 U.S. 84, 94 (1963)); *see also Coal. for Competitive Elec. v. Zibelman*, 272 F. Supp. 3d 554, 576 (S.D.N.Y. 2017) ("[W]hen the State is legitimately regulating a matter of state concern, 'FERC's exercise of its authority must accommodate' that state regulation '[u]nless clear damage to federal goals would result.'") (quoting *Nw. Cent. Pipeline Corp.*, 489 U.S. at 522)).

operation of preferred generation resources."[6] In other words, the Commission believes that the states' exercise of the exclusive authority that Congress reserved to them under the FPA has rendered PJM's capacity market unjust and unreasonable. Even the Commission, however, does not question that these states' efforts fall squarely within their authority: It recently recognized that many state policies, including renewable energy credits (RECs) and the zero-emissions credits (ZECs), which appear to have motivated PJM's section 205 filing, are "not payments for, or otherwise bundled with, sales of energy or capacity at wholesale."[7] Rather, these public policies focus on the significant externalities associated with electricity generation by reflecting "the environmental attributes of a particular form of power generation."[8] Addressing these externalities is at the core of the authority over "generation facilities" that Congress gave to the states when it enacted the FPA. Accordingly, the Commission should, consistent with the federalist design of the statute, accommodate and facilitate those state efforts.[9]

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[6] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236, at P 1 (2018) (Order). In the order approving ISO New England Inc.'s Capacity Auctions with Sponsored Policy Resources (CASPR) proposal, the Commission set out a series of "first principles," the purpose of which the Commission stated was to ensure adequate "investor confidence" in the capacity market. *ISO New England Inc.*, 162 FERC ¶ 61,205, at PP 21, 24 (2018). Ensuring "investor confidence" appeared, albeit briefly, to be the Commission's new standard for evaluating how capacity markets should address state policies. However, just three months later, the Commission appears to have settled on a new standard, the "integrity" of the market, for justifying interference with state policies. Other than a passing reference to the CASPR order, the phrase "investor confidence" is absent from the Commission's discussion in today's order. *See* Order, 163 FERC ¶ 61,236 at P 17 n.24. These shifting justifications should further call into question whether the Commission's interference with state policies is the product of reasoned decision-making rather than a straightforward effort to prop up prices for certain resources.

[7] Brief for the United States and the Federal Energy Regulatory Commission as Amici Curiae in Support of Defendants-Respondents and Affirmance at 10, *Vill. of Old Mill Creek v. Star*, Nos. 17-2433 and 17-2445 (consolidated) (7th Cir. May 29, 2018) (Seventh Circuit Brief); *see WSPP Inc.*, 139 FERC ¶ 61,061, at PP 18-26 (2012).

[8] Seventh Circuit Brief at 10.

[9] *Cf. Ari Peskoe, Easing Jurisdictional Tensions by Integrating Public Policy in Wholesale Markets*, 38 Energy L.J. 1, 38-40 (2017) (discussing the potential for the Commission to address these issues by designing capacity market rules to accommodate

If there is a problem, it lies not with the states, but with the Commission's use of its authority over wholesale rates to mitigate, frustrate, or otherwise limit the states' exercise of their exclusive authority over generation. The Commission argues that today's order "in no way divests the states in the PJM region of their jurisdiction over generation facilities," and that "[s]tates may continue to support their preferred types of resources in pursuit of state policy goals."[10] But by "mitigating" state policies of which the Commission disapproves in an attempt to prop up the wholesale rates received by so-called "competitive" resources, the Commission is directly interfering with state efforts to shape the generation mix. Make no mistake, although the Commission frames today's order in terms of the effect of certain state-sponsored resources on wholesale rates, the order's rationale is clear that the Commission's real aim is to support certain resources that do not benefit from state efforts to address environmental externalities. In attempting to counteract these state policies by propping up those resources, the Commission is exercising its authority over wholesale rates in a manner that aims directly at the states' exclusive jurisdiction.[11]

It is not the Commission's role under the FPA to create an electricity market free from governmental programs aimed at public policy considerations.[12] Although today's

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or reflect state policies).

[10] Order, 163 FERC ¶ 61,236 at P 158.

[11] The Courts have upheld the Commission's authority over capacity markets, including against challenges that certain applications of the MOPR amount to an impermissible regulation of generation. *See, e.g., N.J. Bd. of Pub. Utils. v. FERC*, 74, 96 (3d Cir. 2014); *Conn. Dep't of Pub. Util. Control v. FERC*, 569 F.3d 477, 481-82 (D.C. Cir. 2009). Similarly, the Supreme Court has recognized that certain state efforts to incentivize the construction of new generation resources can intrude on FERC's exclusive jurisdiction where the state's action effectively "sets an interstate wholesale rate." *Hughes*, 136 S. Ct. at 1297. But these cases do not address the situation in which the Commission is targeting state efforts to regulate the consequences of electricity generation that fall within the states' statutory authority and that are not addressed in the markets subject to Commission jurisdiction. The MOPR interferes with the states' prerogatives in a way that Congress neither foresaw nor intended. It impairs the states' ability to make a political decision regarding the generation mix within their borders—a decision that they are far better equipped to make than is the Commission.

[12] *ISO New England Inc.*, 162 FERC ¶ 61,205 at 3 (Glick, Comm'r, dissenting in part and concurring in part).

order fixates on the "integrity" and "effectiveness" of PJM's capacity market,[13] neither of which it defines, the order ignores the fact that governmental policies that internalize the externalities associated with electricity generation are essential to reaching an efficient market outcome.[14] Indeed, PJM's capacity market does not account for arguably the most significant consequence of generating electricity, the unpriced externalities associated with greenhouse gas emissions that are causing climate change. In attempting to mitigate price "suppression," the Commission fails to recognize the cost of stymying state efforts to address environmental externalities, such as climate change.[15] Without policies addressing these externalities, PJM's capacity market will produce a sub-optimal outcome.

It is irrelevant to assert that the Commission lacks jurisdiction to address climate change directly. Even if true, this does not suggest that the Commission can or should "mitigate" state efforts to take on that responsibility. Nor does it suggest that leaving these externalities unaddressed is a natural or desirable outcome, as today's order appears to conclude. In any case, interpreting the FPA to require the Commission to frustrate state efforts to address the environmental costs of electricity generation is, in effect, to deploy the FPA to make it ever more difficult for states to address this existential threat.

The Commission's interference with state policies is all the more problematic because it is picking and choosing which policies to frustrate and which to willfully ignore. Government subsidies pervade the energy markets and have for more than a century. Since 1916, federal taxpayers have supported domestic exploration, drilling, and production activities for our nation's fossil fuel industry.[16] And since 1950, the federal government has provided roughly a trillion dollars in energy subsidies, of which 65

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[13] Order, 163 FERC ¶ 61,236 at PP 1, 150, 157, 161-162.

[14] Sylwia Bialek & Burcin Unel, Institute for Policy Integrity, *Capacity Markets and Externalities: Avoiding Unnecessary and Problematic Reforms* at 12 (2018).

[15] *See, e.g., id.* at 11 (explaining that the annual climate change damages associated with a typical 1,000 MW coal plant are roughly $230 million); Exelon Protest at 12 (estimating that the externalities associated with carbon dioxide alone amount to $12.1 billion to $17.7 billion annually across PJM).

[16] *See* Molly Sherlock, Cong. Research Serv., *Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures* 2-3 (May 2011), *available at* https://fas.org/sgp/crs/misc/R41227.pdf (Energy Tax Policy).

percent has gone to fossil fuel technologies.[17] These policies have artificially reduced the price of natural gas, oil, and coal, which in turn has allowed resources that burn these fuels—including many of the so-called "competitive" resources that stand to benefit from today's order—to submit "suppressed" bids into PJM's markets for capacity, energy, and ancillary services. By lowering the marginal cost of fossil fuel-fired units, government policies have allowed these units to operate more frequently and have encouraged the development of more of these units than might otherwise have been built.

These policies continue to shape the current generation landscape in PJM. Consider the example of natural gas. The federal tax credit for nonconventional natural gas,[18] contributed to the spike in new natural gas-fired power plants between 2000 and 2005,[19] by decreasing the cost of operating those plants. Similarly, the domestic nuclear power industry would not exist without the Price-Anderson Act, which imposes indemnity limits for nuclear power generators, enabling them to secure financing and insurance at rates far below what would reflect their true cost.[20] These and other federal government interventions have had a far greater "suppressive" impact on the markets than the "actionable subsidies" targeted by today's order, yet they are unaccounted for in the order.

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[17] *See* Nancy Pfund and Ben Healey, DBL Investors, *What Would Jefferson Do? The Historical Role of Federal Subsidies in Shaping America's Energy Future*, (Sept. 2011), *available at* http://www.dblpartners.vc/wp-content/uploads/2012/09/What-Would-Jefferson-Do-2.4.pdf; *New analysis: Wind energy less than 3 percent of all federal incentives*, Into the Wind: The AWEA Blog (July 19, 2016), https://www.aweablog.org/14419-2/ (citing, among other things, Molly F. Sherlock and Jeffrey M. Stupak, *Energy Tax Incentives: Measuring Value Across Different Types of Energy Resources*, Cong. Research Serv. (Mar. 19, 2015), *available at* https://fas.org/sgp/crs/misc/R41953.pdf; The Joint Committee on Taxation, *Publications on Tax Expenditures*, https://www.jct.gov/publications.html?func=select&id=5 (last visited June 29, 2018)) (extending the DBL analysis through 2016).

[18] Energy Tax Policy at 2 n.3. That credit has now lapsed. *Id.* at 18.

[19] *Natural gas generators make up the largest share of overall U.S. generation capacity*, Energy Info. Admin. (Dec. 18, 2017), https://www.eia.gov/todayinenergy/detail.php?id=34172.

[20] 42 U.S.C. § 2210(c) (2012).

There are also a plethora of potentially "non-actionable" state and local policies that "suppress" prices in the energy markets, well beyond ZEC and RPS programs. The PJM states have adopted over 100 programs to subsidize all forms of energy sources.[21] For example, West Virginia has enacted tax benefits to support its coal industry, including tax credits for coal loading facilities, thin-seamed coal, and waste coal.[22] Similarly, Pennsylvania exempts natural gas utilities from paying the state's gross receipt tax on their sales, reducing their tax bill by an estimated $82 to $108 million annually while all coal purchases are exempted from Pennsylvania's sales and use tax, a benefit equivalent to $87 million annually.[23] These measures significantly reduce the cost of natural gas and coal produced in Pennsylvania. In addition, natural gas and oil production are one of the few commercial operations exempted from paying local property tax in Pennsylvania, avoiding half a billion to a billion dollars in taxes annually.[24]

Finally, the Commission's list of actionable state policies fails to recognize one of the largest sources of out-of-market support: Roughly 20 percent of the installed capacity within PJM is owned by vertically integrated utilities. Those utilities are guaranteed to recover the cost their resources, irrespective of the price they receive in PJM's capacity market.[25] Nevertheless, the Commission deems these resources "competitive."

If the Commission really wants to protect what it calls the "integrity" of the capacity market, it would need to mitigate each and every federal, state, and local subsidy that allows a resource to lower its capacity market offer as well as the offers of vertically integrated utilities with guaranteed cost recovery. I suspect that we would soon find that there are few, if any, resources that would qualify to participate in PJM's capacity market

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[21] *Subsidy Short List*, PJM Capacity Construct/Public Policy Senior Task Force Meeting, (June 5, 2017), *available at* http://www.pjm.com/-/media/committees-groups/task-forces/ccppstf/20170605/20170605-item-02-subsidy-short-list-20170531.ashx.

[22] *Id.*

[23] *See id.*; PennFuture, *Fossil Fuel Subsidy Report for Pennsylvania* 17-18, 22 (Apr. 2015), *available at* https://pennfuture.org/Files/News/FossilFuelSubsidyReport_PennFuture.pdf (Fossil Fuel Subsidy Report for Pennsylvania).

[24] Fossil Fuel Subsidy Report for Pennsylvania at 32.

[25] Illinois Commerce Commission Protest at 19; Harvard Electricity Law Institute Comments at 8 (noting that generation owned by vertically integrated utilities and public power make up roughly 25 percent of PJM's market).

without being subject to an offer floor. Although that may not be an appealing option, that is no reason to isolate a few disfavored state policies for mitigation and claim, without any support, that they are the only subsidies that threaten the integrity of the market.

Some may argue that the Commission "has to draw a line somewhere." But that line cannot be arbitrary and capricious. It is hard to conceive of a more arbitrary and capricious approach than to inhibit state efforts to price the externalities of electricity generation, but permit other federal, state, and local policies that interfere with the functioning of the markets.

## II. The Record Does Not Support the Commission's Determination that PJM's Tariff Violates the FPA

Today's order is all the more troubling because there is not substantial evidence in the record to support a finding that there is a resource adequacy problem in PJM or that the capacity market is otherwise unjust and unreasonable or unduly discriminatory or preferential. In fact, PJM currently has far more generating capacity than it needs to reliably meet the region's electricity needs, even several years out. PJM's current reserve margin is nearly double what the North American Electric Reliability Corporation (NERC) has determined is necessary, meaning that the region currently has tens of thousands of additional MW of generating capacity beyond what it requires.[26] In addition, there are nearly 40 GW of natural gas-fired generation under development within PJM's footprint—equivalent to 25 percent of the installed capacity in the region—with over half of those MW in a relatively advanced state of development.[27] If anything, PJM's problem is that today's prices are so high that the region continues to attract new "competitive" generation resources at a time when the region already has too much capacity.[28]

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[26] *E.g.*, Exelon January 30, 2017 Protest at 14-15 (Docket No. EL16-49) ("The market is producing resource adequacy—achieving a reserve margin of 22 percent, exceeding its target of 16.5 percent."); Maryland Commission Protest at 5 ("Regarding investment in generation, PJM's Base Residual Auction (BRA) provides ample capacity and has consistently exceeded its target reserve margins."); Consumer Coalition Protest at 12 ("PJM has the most drastic capacity *oversupply* of any RTO in North America.").

[27] Clean Energy Advocates Protest at 36-37 (citing data compiled by S&P Global Market intelligence); Exelon Protest at 35-36.

[28] 1,401.3 MW of new Generation Capacity Resources cleared in the 2021/2022

Perhaps that is why, rather than pointing to actual record evidence of a resource adequacy problem, the Commission relies on theory—and theory alone—to find PJM's Tariff to be unjust and unreasonable. That theory appears to be that certain state subsidies pose a threat to the business model of the Commission's preferred resources and, as a result, at some unspecified point in the future, the capacity market may no longer procure adequate resources at just and reasonable rates.[29] For example, the Commission asserts that "action must be taken" because PJM's Tariff is unable "to adequately address the evolving circumstances presented by resources that receive out-of-market support."[30]

Although the Commission "is free to act based upon reasonable predictions rooted in basic economic principles,"[31] today's order fails to meet this standard. The Commission's conclusions require it to make a litany of assumptions—most of them unstated—about how only certain public policies *may* affect capacity market prices and how that effect on prices *may* impact the "integrity" of PJM's capacity market. For

Base Residual Auction, held in May 2018. That figured included 893.0 MW from new generation units and 508.3 MW from uprates to existing or planned generation units. PJM Interconnection, L.L.C., *2021/2022 RPM Base Residual Auction Results* 4 (2018), *available at* http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx.

[29] The precise contours of the Commission's theory are not exactly clear. If the Commission is asserting that PJM's capacity market is *already* failing to meet this standard because state public policies are resulting in capacity prices that too low to incentivize needed new entry, then the Commission's action is not only unsupported by the record evidence, but contrary to it. As noted above, the most recent auction continued to incentivize new entry, even though PJM's reserve margin far exceeds what is needed for reliability. The 2021/2022 Reliability Pricing Model (RPM) Base Residual Auction (BRA) cleared 163,627.3 MW of unforced capacity in the RTO representing a 22.0% reserve margin. The reserve margin for the entire RTO is 21.5 percent, considerably higher than the target reserve margin of 15.8 percent, when the Fixed Resource Requirement (FRR) load and resources are considered. This reported reserve margin of 21.5 percent does not even reflect the additional 22,877.5 MW of uncleared capacity. *See id.* 1, 19; *see also* PJM Answer at 10 ("PJM's prices have been low in large measure because PJM is carrying reserve margins in excess of 25%.").

[30] Order, 163 FERC ¶ 61,236 at P 32.

[31] *Emera Maine v. FERC*, 854 F.3d 662, 671 (D.C. Cir. 2017).

example, the Commission asserts that there is evidence that state policies may significantly affect the capacity market price.[32] However, rather than citing to this elusive evidence, the order quotes an affiant's opinion as to what the out-of-market support payments provided by certain state programs equate to in dollars per MW-day.[33] Dividing the size of a subsidy by the number of MW-days is arithmetic, not evidence that the subsidy is rendering PJM's Tariff unjust and unreasonable.

Similarly, the Commission claims that any reduction in the capacity market price that is caused by these state policies will be sufficient to render PJM's tariff unjust and unreasonable. But the Commission does not point to any evidence about the size of this potential reduction or why a reduction of that size—as opposed to some other level—is sufficient to render the Tariff unjust and unreasonable. Instead, the Commission enumerates several subsidies provided by states in PJM[34] without meaningfully linking the existence of those programs to the claim that PJM's capacity market may not result in just and reasonable rates. Based on the PJM auction results and the entire record before us, the speculation in today's order is an insufficient basis to find PJM's existing Tariff to be unjust and unreasonable.

The Commission also claims without support that PJM's Tariff is unjust and unreasonable simply because it does not mitigate state policies, thereby creating uncertainty for "competitive" resources that do not know whether they will be competing against other resources that receive a subsidy considered by the Commission to be problematic.[35] In other words, the mere prospect of an unmitigated "actionable" subsidy renders PJM's Tariff unjust and unreasonable, regardless of whether that subsidy would actually affect the market-clearing price. That cannot be true. Uncertainty in many forms—commodity price uncertainty, demand uncertainty, and, yes, policy uncertainty—pervades the electricity industry and the Commission leaves it to private companies to manage that uncertainty. Nothing in today's order explains why the uncertainty created by certain state policies is any different or why that difference is sufficient to render PJM's Tariff unjust and unreasonable. And it is ironic to bemoan policy uncertainty

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[32] Order, 163 FERC ¶ 61,236 at P 151.

[33] *Id.* (quoting Giacomoni Aff. at 10-11).

[34] *Id.* P 152-153.

[35] *Id.* P 150. It is unclear why the Commission limits this uncertainty to "competitive" resources. Every resources faces uncertainty that policy developments relatively favorable to its competitors will make its position less advantageous.

when Commission's and PJM's constant tinkering with the capacity market is one of, if not the, single biggest sources of uncertainty facing capacity market participants.[36]

Finally, it is again important to point out what the Commission's rationale means for efforts to fight climate change. The Commission's explanation of the problem with the PJM capacity market suggests that any state efforts to compensate resources for their environmental attributes would render those resources' offers "uncompetitive." In so doing, the Commission is concluding that resources can only be valued by the capacity they provide and that their environmental attributes must be valued at zero. I am aware of nothing in the FPA, our regulations, or the many court cases interpreting both that requires us to use our authority to stymie state efforts to fight climate change in this manner. Doing so puts the Commission on the wrong side of history in the fight against climate change.

## III. The Commission's Proposed Replacement Rate Leaves Open Significant Questions that Cannot Be Meaningfully Answered in the Time Provided

Having declared PJM's Tariff unjust and unreasonable based on theory alone, the Commission proposes a replacement rate that fundamentally redesigns PJM's capacity market. This proposed approach—which combines an expanded MOPR, with all the attendant problems outlined above, with a "resource-specific FRR Alternative"—would be the most significant change in the capacity market's twelve-year history. Although the Commission itself acknowledges that there are important details to address in the design of a resource-specific FRR Alternative, the proposed questions for the paper hearing barely scratch the surface of the issues raised by such fundamental reforms. I agree with my colleague Commissioner LaFleur's observation that the record before the Commission contains virtually no discussion of a resource-specific FRR Alternative and that today's proposal is "little more than a rough concept, with major design elements left unresolved."[37] Making matters worse, the Commission provides almost no time—just three months—for PJM and its stakeholders to respond to these questions and provide the record needed to carry out the Commission's capacity market overhaul.

To reiterate, I strongly disagree that the current PJM Tariff is unjust and unreasonable and I am not convinced at this time that the Commission's proposal for a resource-specific FRR Alternative will sufficiently accommodate the state policies that are the target of the expanded MOPR. Nevertheless, I recognize that there can be more

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[36] *ISO New England Inc.*, 162 FERC ¶ 61,205 at 5 n.13 (Glick, Comm'r, dissenting in part and concurring in part) ("[C]hange has been the only consistent feature of capacity markets in recent years.").

[37] Order, 163 FERC ¶ 61,236 at 4 (LaFleur, Comm'r, dissenting).

than one just and reasonable rate and, for that reason, reserve judgment on whether a resource-specific FRR Alternative could ever be just and reasonable. Below, I outline several concerns regarding the Commission's proposal that will be essential to evaluating PJM's filing.

### A. Eligibility

The Commission proposes to create a bifurcated capacity market that classifies resources as either receiving "out-of-market support" or as being deemed "competitive." Those receiving out-of-market support will be subject to the expanded MOPR and also be eligible for the proposed resource-specific FRR Alternative. That distinction is the keystone of the Commission's proposal. Nevertheless, today's order provides scant guidance regarding what government policies will trigger mitigation, and the limited guidance that it does provide suggests that the Commission will continue to arbitrarily pick and choose which governmental policies to target.

Although the Commission asks for comments on the "appropriate scope of out-of-market support to be mitigated" and "whether federal sources of out-of-market support should be addressed by Commission action,"[38] the Commission also explicitly states that PJM "need only address the forms of state support that we find, in this proceeding, render the current Tariff unjust and unreasonable—i.e., out-of-market revenue that a state either provides, or requires to be provided, to a supplier that participates in the PJM wholesale capacity market."[39] This puzzling combination of statements appears to mean that the Commission need address only *state* policies and, specifically, only those that provide out-of-market *revenue*, as opposed to policies that reduce costs. As I have explained above, these distinctions are arbitrary, capricious, and incapable of forming the basis for a just and reasonable and not unduly discriminatory or preferential market construct.

### B. FRR Construct

The Commission's proposed replacement rate appears to present a false option for state-sponsored resources: Either choose to participate in the capacity market and be subject to the expanded MOPR, with the substantial risk that the resource will not clear the market, or else elect the resource-specific FRR Alternative, forfeiting any prospect of receiving a capacity payment from PJM for capacity that the resource will actually provide. Far from "accommodating" state policies, the Commission seems to ignore (or

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[38] *Id.* at PP 165, 171.

[39] *Id.* P 1 n.1.

at least disregard) the fact that the out-of-market payments of which it apparently disapproves are not replacements for capacity payments, but rather are payments for attributes not accounted for in PJM's capacity market.[40] In forcing these resources to find compensation outside of the market, the Commission's proposal raises a host of questions. I am particularly interested in hearing from PJM and its stakeholders regarding the following issues:

1. **Selecting the resource-specific FRR Alternative.** How will state-sponsored resources elect the resource-specific FRR Alternative? What is the basis for limiting the resource-specific FRR Alternative to state-sponsored resources? Alternatively, should all resources have the option to elect the resource-specific FRR Alternative? What would be the impact of such an option? I will note that opening the resource-specific FRR Alternative to all resources would appear to give customers more flexibility and forestall continuous litigation regarding arbitrary judgments or cutoffs for resource eligibility.

2. **Compensating FRR Resources.** What options will FRR resources have for recovering the shortfall between their out-of-market support and their net going-forward costs? As noted, most of the state policies targeted by today's order compensate resources for environmental attributes and were not designed to be a substitute for a capacity payment. Will any of the state programs that the Commission intends to mitigate the effects of require legislative action to allow the resources that receive support pursuant to those programs to receive additional compensation either by the state or a load-serving entity (LSE)? Could resources enter into bilateral agreements with LSEs for the additional capacity payments? If so, should there be limitations on which LSEs are eligible to enter such contracts (based on, for example, the source of the out-of-market support)? If not, will states have any alternative to increasing the out-of-market support to compensate resources for capacity in addition to their environmental attributes? What is a reasonable time period in which to expect states to make any changes to their compensation structures? How does this vary between states that have enacted their policies via legislation versus regulation?

3. **Matching an FRR Resource with Load.** Who will determine what load is removed from the RPM auction for a given FRR resource and how will that determination be made? Should the determination be made by the FRR resource

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[40] Illinois Commerce Commission Protest at 3 n.7 (arguing that PJM mischaracterizes state public policies "which provide due compensation for output produced by resources having beneficial environmental and public health characteristics," the purpose of which is not to subsidize, but "to compensate the provision of valuable attributes that are uncompensated in PJM markets").

itself, the LSE(s), PJM, the sponsoring-state or some entities or entities? What would be the relative benefits and downsides of the various ways in which this might be accomplished? How would any such approach impact municipalities, cooperatives, and public power entities? Should the FRR resource be permitted to split its supply among different LSEs? What other steps are necessary for ensuring that the entities that provide the out-of-market support receive the benefit of the reduced capacity obligation in the RPM auctions? Would different state programs require different approaches? For example, cross-state renewable energy certificate (REC) programs may not have an obvious associated load—how should that be addressed? Do LSEs or other wholesale loads that self-supply present any unique considerations for a resource-specific FRR Alternative? Other than interstate REC programs, are there other governmental policies that could require a tailored approach?

4. **Timing.** Does PJM currently have the information about governmental programs and LSE constructs needed to evaluate options and address these questions? If not, how much time does PJM need to work with the states and stakeholders to gather sufficient information?

## C. Reliability Pricing Model Auction Design

PJM and its stakeholders also need to consider how a resource-specific FRR Alternative will interact with the existing capacity market construct and whether any changes are needed to the structure of the Reliability Pricing Model (RPM) and its auctions. In so doing, PJM and its stakeholders should evaluate the following considerations:

1. **Auction Structure.** Assuming that state-sponsored resources can elect the resource-specific FRR Alternative and PJM has determined which load to associate with those resources, are there any other changes that would need to be considered to the structure of the RPM Auctions? Currently, load served under the existing FRR Alternative is deducted from the installed reserve margin and is defined by the FRR Service Area. Can this approach to structuring the RPM auctions work under the resource-specific FRR Alternative? What additional challenges, if any, would be presented if the load associated with resources that elected the resource-specific FRR Alternative cannot be defined in an FRR Service Area?

2. **Locational Needs.** How could PJM ensure that locational resource adequacy needs are met (respecting transmission constraints) while simultaneously removing an increasing amount of FRR load from the RPM? For example, how will PJM account for deliverability constraints in assigning a given FRR resource's capacity to offset a specific load's resource adequacy requirement if the resource is located in a constrained area that cannot reach load? Would doing so

require any changes to the current Capacity Emergency Transfer Objective (CETO) /Capacity Emergency Transfer Limit (CETL) analysis, or its underlying assumptions? Would an increasing amount of FRR load over time (e.g., based on increasing renewable targets in some states) present any additional considerations?

3. **VRR Curve.** Today's order asks whether changes are needed to the demand curve, or variable resource requirement (VRR) curve. The removal of additional load would reduce the installed reserve margin represented in the VRR curve for capacity and would result in shifting the VRR curve to reflect the smaller market. Presumably, the Commission is asking if any further changes would be needed, such as the shape of the curve. What are the primary considerations for determining whether the VRR curve shape would need to be modified? Would a smaller market inherently require a differently shaped curve? How would this ensure that the auctions are competitive?

4. **Market Power.** Would the resource-specific FRR Alternative present any additional market power concerns? With a smaller market with fewer resources competing, would the existing market power mitigation measures be sufficient? If not, what additional tools would be needed?

5. **Capacity Performance.** How would the resource-specific FRR Alternative impact PJM's Capacity Performance construct? Currently, FRR entities can choose between financial or physical satisfaction of the Non-Performance Charge when a resource in the entity's FRR plan fails to meet its expected performance during a Performance Assessment Hour. Under the financial option, the entity pays the same Non-Performance Charge that applies to RPM Capacity Performance Resources. Under the physical option, the entity must commit additional capacity in the subsequent delivery year for each MW of performance shortfall. Is this still an appropriate structure if the Commission adopts the proposed FRR Alternative? If so, why would the associated load be required to commit additional capacity in a subsequent delivery year for the failure to perform of a resource that it does not own?

Once again, a resource-specific FRR Alternative can be just and reasonable only insofar as it allows state-sponsored resources to easily and timely become FRR resources with proportional load removed from PJM's centralized capacity market, thereby effectively accommodating governmental policies that address the externalities associated with electricity production.

Regarding the timeline, requiring interested parties to decipher today's order, develop testimony, gather evidence, and meaningfully respond within 60 days is irresponsible. On top of that, this short timeframe essentially guarantees that PJM will not be able to work with the states to develop a proposal that aligns with state policies. Even assuming that interested parties had sufficient time, and the Commission issued an order by January 4, 2019, it is unreasonable to assume that PJM could implement such fundamental market changes in time for its May 2019 auction, and that state-sponsored resources could cover the missing capacity payments if those resources elect to use the new resource-specific FRR Alternative. The most likely result is that PJM will have to delay its May 2019 auction, notwithstanding that delay, that PJM will over-procure capacity because states and sponsored resources will not have time to react and make alternative plans.

* * *

I close by noting the irony embedded in today's order. Decrying government involvement in the electricity sector, the Commission is taking action to increase the prices its preferred generation resources receive and stave off efforts to decarbonize the generation mix. Today's order is just government intervention by another name. The Commission appears untroubled by the fact that it is exercising essentially the same governmental role in shaping the generation mix that it simultaneously decries. The difference, however, between the state actions that the Commission now threatens and the Commission's action today is that Congress authorized the states to regulate the generation mix and expressly precluded the Commission from doing so. As I explained in my partial dissent from the CASPR order, the proper role for the Commission is to "get out of the business of mitigating the effects of state policies and instead encourage the RTOs/ISOs to work with the states to pursue a resource adequacy paradigm that respects states' role in shaping the generation mix while at the same time ensuring that we satisfy our responsibilities under the FPA."[41]

Accordingly, I respectfully dissent.

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Richard Glick
Commissioner

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[41] *ISO New England Inc.*, 162 FERC ¶ 61,205 at 6 (Glick, Comm'r, dissenting in part and concurring in part).

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC<br><br>v.<br><br>PJM Interconnection, L.L.C. | Docket Nos. EL16-49-000 |
| PJM Interconnection, L.L.C. | ER18-1314-000<br>ER18-1314-001 |
| PJM Interconnection, L.L.C. | EL18-178-000<br>(Consolidated) |

(Issued June 29, 2018)

POWELSON, Commissioner, *concurring*:

I strongly support today's order. I write separately to acknowledge the significance of the majority's decision and its impact on the future of wholesale energy markets in the PJM region. The issue of out-of-market support for preferred resources is not a new one. In 2013, the Commission opened a proceeding to discuss the interplay between state public policy decisions and wholesale markets.[1] In May 2017, the Commission continued that effort by holding a two-day technical conference to further explore the issues. After years of open dialogue unconstrained by *ex-parte* restrictions, the Commission failed to provide guidance on one of the most pressing issues facing wholesale electricity markets. PJM ultimately took the lead and proposed two options. However, the majority – as well as many stakeholders – could not find either to be just

[1] Centralized Capacity Markets in Regional Transmission Organizations and Independent System Operators, Docket No. AD13-7-000 (June 17, 2013).

and reasonable solutions to the problem. Today, the Commission sets forth a third solution, and in doing so, provides much-needed guidance to PJM and its stakeholders.

Let me be clear: there is a problem. The Federal Power Act compels this Commission to ensure just and reasonable rates. The record before us clearly indicates that unfettered access to wholesale energy markets by state-supported resources leads to unjust and unreasonable rates. If the Commission did not find today that the existing PJM tariff is unjust and unreasonable, it would be ignoring the duties prescribed to it under the Federal Power Act.

I have come to realize that there is no one-size-fits-all solution to ensure state decisions to support certain resources do not impact the wholesale market. Under the Federal Power Act, the states are able to procure the resources they prefer. Notwithstanding the fact that I did not support ISO-New England's Competitive Auctions with Subsidized Policy Resources (CASPR) mechanism, I acknowledge that it reflected a regionally-tailored approach to the problem.[2] The fact that CASPR may work for ISO-NE does not mean it is an appropriate solution for PJM. The problem in New England was the accommodation of *new* state-supported resources as opposed to the problem in PJM, which is an accommodation *existing* state-supported resources.

The resource-specific FRR Alternative provides a solution that is appropriate for the unique set of circumstances in the PJM region. The proposed resource-specific FRR Alternative is based, in principle, on the existing FRR construct that has existed in the PJM tariff for many years. It is not an entirely new concept to PJM and its stakeholders. Further, the idea of an expanded MOPR has a more-than-robust record from a diverse set of interested parties. I am aware that the order sets forth an aggressive timeline for this action. However, this is a problem that is long overdue for a solution, and I am confident that all stakeholders, including the states, will be ready and willing to roll up their sleeves and work to towards a solution that is consistent with the Commission's guidance.

Further, I do not believe that individual state decisions to re-regulate should be an overriding factor in our decision-making. The Commission's responsibility is to protect the integrity of the wholesale markets and ensure just and reasonable rates. We cannot make decisions based on speculation about what states may or may not do. Moreover, the approach outlined in today's order – the resource-specific FRR Alternative – allows states the flexibility to procure preferred resources, while also allowing them to remain in the wholesale energy and ancillary services markets. The tradeoff is that the states will bear the cost responsibility of their resource-specific decisions, which is consistent with

[2] *ISO New England Inc.*, 162 FERC ¶ 61,205 (2018) (Powelson, Comm'r, dissenting).

the fundamental ratemaking principle of cost-causation. Simultaneously, through the expanded MOPR, the market will remain free from the effects of subsidized resources. If states find that the resources they select are cost-prohibitive, or undesirable for any other reason, they may either: 1) select more cost effective resources, or 2) rely on the capacity market to select resources to meet resource adequacy goals.

I, too, believe that capacity markets can and do provide meaningful benefits to consumers. I have been a tireless advocate of competition and the principles that have been a cornerstone of FERC policy for many years. Failure to take decisive action would be a disservice to PJM, its stakeholders, and ultimately consumers.

Accordingly, I respectfully concur.

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Robert F. Powelson, Commissioner

169 FERC ¶ 61,239
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick and Bernard L. McNamee.

Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC

v.

PJM Interconnection, L.L.C.

PJM Interconnection, L.L.C.

Docket Nos. EL16-49-000
EL18-178-000
(Consolidated)

ORDER ESTABLISHING JUST AND REASONABLE RATE

(Issued December 19, 2019)

1. On June 29, 2018, the Commission issued an order[1] finding that out-of-market payments provided, or required to be provided, by states to support the entry or continued operation of preferred generation resources threaten the competitiveness of the capacity market administered by PJM Interconnection, L.L.C. (PJM).[2] Specifically, the Commission found that PJM's Open Access Transmission Tariff (Tariff) is unjust and unreasonable because the Minimum Offer Price Rule (MOPR) fails to address the price-distorting impact of resources receiving out-of-market support. The Commission also found, however, that it could not make a final determination regarding the just and reasonable replacement rate, based on the record presented, and therefore initiated a paper hearing on its own motion in Docket No. EL18-178-000 pursuant to section 206 of the Federal Power Act (FPA).[3]

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[1] *PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 (2018) (June 2018 Order).

[2] The June 2018 Order defines "out-of-market payments" as out-of-market revenue that a state either provides, or requires to be provided, to a supplier that participates in the PJM wholesale capacity market. Out-of-market payments include, for example, zero-emissions credits (ZEC) programs and Renewable Portfolio Standards (RPS) programs. June 2018 Order, 163 FERC ¶ 61,236 at P 1 n.1. This order creates a new term, State Subsidies, defined below.

[3] 16 U.S.C. § 825e (2018).

2. As discussed below, we direct PJM to submit a replacement rate that retains PJM's current review of new natural gas-fired resources under the MOPR and extends the MOPR to include both new and existing resources, internal and external, that receive, or are entitled to receive, certain out-of-market payments, with certain exemptions explained below. Going forward, the default offer price floor for applicable new resources[4] will be the Net Cost of New Entry (Net CONE) for their resource class; the default offer price floor for applicable existing resources[5] will be the Net Avoidable Cost Rate (Net ACR) for their resource class. The replacement rate will include three categorical exemptions to reflect reliance on prior Commission decisions: (1) existing self-supply resources, (2) existing demand response, energy efficiency, and storage resources, and (3) existing renewable resources participating in RPS programs. The replacement rate will also include a fourth exemption, the Competitive Exemption, for new and existing resources that are not subsidized and thus do not generally require review to protect "the integrity and effectiveness of the capacity market."[6] To preserve flexibility, PJM will also permit new and existing suppliers that do not qualify for a categorical exemption to justify a competitive offer below the applicable default offer price floor through a Unit-Specific Exemption.[7] Collectively, these exemptions underscore our general intent that most existing resources that have already cleared a capacity auction, particularly those resources the Commission has affirmatively exempted in prior orders, will continue to be exempt from review. Similarly, new resources that certify to PJM that they will not receive out-of-market payments will generally be exempt from review through the Competitive Exemption, with the exception of new gas-fired resources, which were already subject to review under the current MOPR[8] and will remain so under the replacement rate.[9]

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[4] "New" refers to resources that have not previously cleared a PJM capacity auction.

[5] Except as otherwise specified in this order, "existing" refers to resources that have previously cleared a PJM capacity auction. Repowered resources will be considered new.

[6] June 2018 Order, 163 FERC ¶ 61,236 at PP 1-2.

[7] The current Tariff refers to this as the Unit-Specific Exception.

[8] PJM's current MOPR refers to the MOPR reinstated in 2017 following the remand from the D.C. Circuit in *NRG Power Marketing, LLC v. FERC*. 862 F.3d 108 (D.C. Cir. 201) (*NRG*); *see PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,252 (2017) (2017 MOPR Remand Order).

[9] On December 19, 2019, Commissioner Bernard L. McNamee issued a memorandum to the file documenting his decision not to recuse himself from these

3. In establishing this replacement rate under section 206 of the FPA, we do not order refunds. Section 206 of the FPA confers the Commission with the discretion to order refunds from the date that Calpine Corporation, joined by additional generation entities (collectively, Calpine Complainants), filed the complaint in Docket No. EL16-49-000 (Calpine complaint), and we decline to invoke that discretion here.[10]

4. We direct PJM to submit a compliance filing consistent with our guidance within 90 days of the date of this order. In the compliance filing, PJM should also provide revised dates and timelines for the 2019 Base Residual Auction (BRA) and related incremental auctions, along with revised dates and timelines for the May 2020 BRA and related incremental auctions, as necessary.

5. We affirm our initial finding that "[a]n expanded MOPR with few or no exceptions, should protect PJM's capacity market from the price-suppressive effects of resources receiving out-of-market support by ensuring that such resources are not able to offer below a competitive price."[11] However, based on the reasoning set forth below, we do not at this time require review of all offers below the default offer price floor. Moreover, this replacement rate does not purport to solve every practical or theoretical flaw in the PJM capacity market asserted by parties in these consolidated proceedings, or in related proceedings.[12] There continue to be stark divisions among stakeholders about various issues that we cannot resolve on this record. Instead, we concentrate on the core problem presented in the Calpine complaint and in PJM's April 2018 rate proposal—that is, the manner in which subsidized resources distort prices in a capacity market that relies on competitive auctions to set just and reasonable rates.

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dockets, based on memoranda dated October 11, 2019 and December 13, 2019 (and attachments thereto, including email communications dated June 17 and September 17, 2019) from the Designated Agency Ethics Official and Associate General Counsel for General and Administrative Law in the Office of General Counsel.

[10] 16 U.S.C. § 824e(b); June 2018 Order, 163 FERC ¶ 61,236 at P 174; *see Ameren Servs. Co. v. Midwest Indep. Transmission Sys. Operator, Inc.*, 127 FERC ¶ 61,121, at P 157 (2009) ("In cases involving changes to market design, the Commission generally exercises its discretion and does not order refunds when doing so would require re-running a market.").

[11] June 2018 Order, 163 FERC ¶ 61,236 at P 158.

[12] *See id.* PP 16-19 (discussing the Commission's technical conference in Docket No. AD17-11-000 and the complaint filed in Docket No. EL18-169-000).

6. In general, the replacement rate is derived from PJM's initial MOPR-Ex proposal,[13] with certain modifications. We find this approach is superior to the two potential reform paradigms that PJM submitted in this paper hearing proceeding: (1) the resource-specific Fixed Resource Requirement (FRR) Alternative described in the June 2018 Order,[14] which PJM proposed to implement through its Resource Carve-Out (RCO) option,[15] and (2) the revised version of PJM's initial Capacity Repricing proposal that the Commission rejected in the June 2018 Order,[16] which PJM proposed to implement through its Extended Resource Carve-Out (Extended RCO) proposal.[17] In both cases, the accommodation of state subsidy programs would have unacceptable market distorting impacts that would inhibit incentives for competitive investment in the PJM market over the long term. We also decline to adopt intervenors' alternative proposals.[18]

7. The first significant change we require in the replacement rate is that PJM must extend the MOPR to include review of offers made by non-exempt existing resources in addition to new entrants. This is necessary because the record demonstrates that an immediate threat to the competitiveness of the PJM capacity market is the decision by some states to employ out-of-market subsidies to prevent or delay the retirement of state-

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[13] Of the two mutually-exclusive proposals PJM presented in April 2018, MOPR-Ex received significantly more stakeholder support than the Capacity Repricing alternative that PJM posited as its first choice. *See* PJM Transmittal Letter at 17 n.40; June 2018 Order, 163 FERC ¶ 61,236 at PP 4 n.4, 20.

[14] The Commission described the resource-specific FRR Alternative as an option, similar in concept to the utility-wide FRR construct in the preexisting Tariff, which would allow suppliers to choose to remove individual resources receiving out-of-market support from the PJM capacity market, along with a commensurate amount of load, for some period of time. *See* June 2018 Order, 163 FERC ¶ 61,236 at PP 8, 160.

[15] *See* PJM Initial Testimony at 50-64.

[16] *See* June 2018 Order, 163 FERC ¶ 61,236 at PP 63-72.

[17] *See* PJM Initial Testimony at 64-75.

[18] *See, e.g.*, Exelon Initial Testimony at 7 (proposing a carbon pricing mechanism); Maryland Commission Initial Testimony at 9-10 (proposing a competitive carve-out auction); Vistra Initial Testimony at 3-4 (proposing a two-stage auction, based in part on ISO New England Inc.'s Competitive Auctions with Sponsored Policy Resources); Buckeye Initial Testimony at 4 (proposing that PJM's capacity market operate on a strictly voluntary and residual basis).

preferred resources that are unable to compete with more efficient generation.[19] Moreover, certain states have chosen to enact additional programs even after the June 2018 Order issued.[20] We are aware that the extension of the MOPR may prevent certain existing resources that states have recently chosen to subsidize from clearing PJM's capacity auctions; however, the decision by certain states to support less economic or uneconomic resources in this manner cannot be permitted to prevent the new entry or continued operation of more economic generating capacity in the federally-regulated multi-state wholesale capacity market. New state policies that support the continued operation of existing uneconomic resources in PJM are just as disruptive to competitive wholesale market outcomes as earlier attempts to support preferred new gas-fired resources, which the Commission prevented by eliminating the state mandate exemption for new resources in 2011.[21] As in that earlier proceeding, the replacement rate adopted here does not deprive states in the PJM region of jurisdiction over generation facilities because states may continue to support their preferred resource types in pursuit of state policy goals.[22] Nor does this order prevent states from making decisions about preferred generation resources: resources that states choose to support, and whose offers may fail to clear the capacity market under the revised MOPR directed in this order, will still be permitted to sell energy and ancillary services in the relevant PJM markets. However, the Commission has a statutory obligation, and exclusive jurisdiction, to ensure that wholesale capacity rates in the multi-state regional market are just and reasonable.[23] We

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[19] *See, e.g.*, June 2018 Order, 163 FERC ¶ 61,236 at PP 1-2, 21-22, 96, 102-03, 105-06, 150-56.

[20] *See infra* note 55 (describing new legislation).

[21] *See PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 (2011) (2011 MOPR Order), *reh'g denied*, 137 FERC ¶ 61,145 (2011) (2011 MOPR Rehearing Order), *aff'd sub nom. N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d 74 (3d Cir. 2014) (*NJBPU*).

[22] *See* June 2018 Order, 163 FERC ¶ 61,236 at PP 158-59.

[23] *See* 16 U.S.C. §§ 824, 824d, 824e; 2011 MOPR Order, 135 FERC ¶ 61,022 at P 143 ("While the Commission acknowledges the rights of states to pursue legitimate policy interests, and while, as we have said, any state is free to seek an exemption from the MOPR under section 206, it is our duty under the FPA to ensure just and reasonable rates in wholesale markets. . . . Because below-cost entry suppresses capacity prices, and because the Commission has exclusive jurisdiction over wholesale rates, the deterrence of uneconomic entry falls within the Commission's jurisdiction, and we are statutorily mandated to protect the [capacity market] against the effects of such entry."), *quoted with approval in NJBPU*, 744 F.3d at 100, *cited in Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1296 (2016); 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 3 ("Our intent is not to pass judgment on state and local policies and objectives with regard to the

find that this replacement rate will ensure resource adequacy at rates that are just and reasonable and not unduly discriminatory or preferential.[24]

8. The second significant change we require in the replacement rate is that PJM must extend the MOPR to apply to all resource types.[25] The June 2018 Order did not find that PJM's ongoing review of new gas-fired resources under the current rule was unjust or unreasonable and nothing submitted in the paper hearing has persuaded us to alter that conclusion. However, the record in this proceeding demonstrates that gas-fired generation facilities "are not the only resources likely or able to suppress capacity prices."[26] The increased level of out-of-market support for certain renewable resources in PJM through RPS programs, in addition to out-of-market support for nuclear- and coal-fired plants through ZEC programs and the Ohio Clean Air program, requires us to revisit the Commission's earlier conclusion that non gas-fired resources do not require mitigation.

9. We therefore find that any resource, new or existing, that receives, or is entitled to receive, a State Subsidy, and does not qualify for one of the exemptions described in the

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development of new capacity resources, or unreasonably interfere with those objectives. We are forced to act, however, when subsidized entry supported by one state's or locality's policies has the effect of disrupting the competitive price signals that PJM's [capacity auction] is designed to produce, and that PJM as a whole, including other states, rely on to attract sufficient capacity."), *quoted with approval in NJBPU*, 744 F.3d at 101, *quoted with approval in Hughes*, 136 S. Ct. at 1296. This determination also comports with precedent in other regional markets. *See, e.g.*, *ISO New England Inc.*, 162 FERC ¶ 61,205, at P 21 & n.32 (2018) (CASPR Order); *ISO New England, Inc.*, 135 FERC ¶ 61,029, at P 170 (2011) (2011 ISO-NE MOPR Order), *reh'g denied*, 138 FERC ¶ 61,027 (2012), *aff'd sub nom. New Eng. Power Generators Ass'n v. FERC*, 757 F.3d 283, 293-295 (D.C. Cir. 2014) (*NEPGA*); *Connecticut Dept. of Pub. Util. Control v. FERC*, 569 F.3d 477, 481 (D.C. Cir. 2009) (*Connecticut PUC*), *adopted in NJBPU*, 744 F.3d at 96-97.

[24] June 2018 Order, 163 FERC ¶ 61,236 at P 158; PJM Tariff, Att. DD, § 1 (stating, among other things, that the Reliability Pricing Model (RPM or capacity market) provides for the forward commitment of resources to ensure reliability in future delivery years); *see also* CASPR Order, 162 FERC ¶ 61,205 at P 21 (a capacity market should "produce a level of investor confidence that is sufficient to ensure resource adequacy at just and reasonable rates").

[25] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 155.

[26] *Id*.

body of this order, should be subject to the MOPR.[27] Borrowing from the first two prongs of PJM's proposed definition of Material Subsidy, we consider a State Subsidy to be: a direct or indirect payment, concession, rebate, subsidy, non-bypassable consumer charge, or other financial benefit that is (1) a result of any action, mandated process, or sponsored process of a state government, a political subdivision or agency of a state, or an electric cooperative formed pursuant to state law, and that (2) is derived from or connected to the procurement of (a) electricity or electric generation capacity sold at wholesale in interstate commerce, or (b) an attribute of the generation process for electricity or electric generation capacity sold at wholesale in interstate commerce, or (3) will support the construction, development, or operation of a new or existing capacity resource, or (4) could have the effect of allowing a resource to clear in any PJM capacity auction. Demand response, energy efficiency, and capacity storage resources that participate in the PJM capacity market are considered to be capacity resources for purposes of this definition. Resources that receive, or are entitled to receive, State Subsidies (hereinafter referred to as State-Subsidized Resources) that intend to offer below the default offer price floor for a given resource type, and do not qualify for a categorical exemption, must support their offers through a Unit-Specific Exemption. We decline to adopt a materiality threshold for the level of State Subsidies or the size of State-Subsidized Resources. A threshold based on resource size will not prevent a collection of smaller resources from having a significant cumulative impact on competitive outcomes. In addition, if a State Subsidy is small enough for a capacity resource to perform economically without it, then the State-Subsidized Resource should be able to secure a Unit-Specific Exemption.

10. We find that we cannot, however, apply this approach to resources that receive out-of-market support through subsidies created by federal statute. That is not because we think that federal subsidies do not distort competitive market outcomes. On the contrary, federal subsidies distort competitive markets in the same manner that State Subsidies do. Nevertheless, the Commission's authority to set just and reasonable rates under the FPA comes from Congress and subsidies that are directed by Congress through federal legislation have the same legal force as the FPA. This Commission may not disregard or nullify the effects of federal legislation.[28]

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[27] New and existing resources that certify to PJM that they will forego any State Subsidies to which they are entitled qualify for the Competitive Exemption.

[28] *See, e.g.*, *Morton v. Mancari*, 417 U.S. 535, 550-51 (1974) ("Where there is no clear intention otherwise, a specific statute will not be controlled or nullified by a general one, regardless of priority enactment."); *Silver v. N.Y. Stock Exchange*, 373 U.S. 341, 357 (1963) (an appropriate analysis is one that "reconciles the operation of both statutory schemes with one another rather than holding one completely ousted"); *Tug Allie-B. v. United States*, 273 F.3d 936, 941 (11th Cir. 2001) (reiterating general statutory

11. We also find that the just and reasonable replacement rate should provide five exemptions from application of the default offer price floor.

12. First, we direct PJM to include a Self-Supply Exemption for self-supply resources that fulfill at least one of these criteria: (1) have successfully cleared an annual or incremental capacity auction prior to this order; (2) have an executed interconnection construction service agreement on or before the date of this order; or (3) have an unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of this order.[29] This exemption recognizes that many self-supply entities made resource decisions based on Commission orders indicating that those decisions would not be disruptive to competitive markets, including the Commission's acceptance in 2013 of the affirmative exemption for new self-supply resources prior to our order on remand from *NRG*.[30] However, as further discussed below, we can no longer assume that there is any substantive difference among the types of resources participating in PJM's capacity market with the benefit of State Subsidies. Going forward, new non-exempt resources owned by self-supply entities will be subject to review for offers below the default offer price floor on the same basis as other resources of the same type. Public power and vertically integrated utilities that prefer to craft their own resource adequacy plans remain free to do so through the FRR Alternative option already present in the existing PJM Tariff.

13. Second, we direct PJM to include a Demand Response, Energy Efficiency, and Capacity Storage Resources Exemption.[31] Demand response and energy efficiency resources that fulfill at least one of these criteria will be eligible: (1) have successfully cleared an annual or incremental capacity auction prior to this order; (2) have completed registration on or before the date of this order; or (3) have a measurement and verification plan approved by PJM for the resource on or before the date of this order. Similarly, capacity storage resources that fulfill at least one of these criteria will be eligible:

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construction canons that statutes relating to the same subject matter should be construed harmoniously and, if not, the more recent or specific statute should prevail over the older and more general law).

[29] *See infra* IV.D.3.

[30] *See PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090, at P 107-15 (2013) (2013 MOPR Order), *order on reh'g & compliance*, 153 FERC ¶ 61,066, at P 52-61 (2015) (2015 MOPR Order), *vacated & remanded sub nom. NRG Power Mktg., LLC v. FERC*, 862 F.3d 108 (D.C. Cir. 2017) (*NRG*). *But see* 2017 MOPR Remand Order 161 FERC ¶ 61,252, at P 41 (removing the self-supply exemption on remand from *NRG*), *reh'g pending*.

[31] *See infra* IV.D.4.

(1) have successfully cleared an annual or incremental capacity auction prior to this order; (2) have an executed interconnection construction service agreement on or before the date of this order; or (3) have an unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of this order. This exemption is justified because these resources traditionally have been exempt from review. However, PJM must develop appropriate Net CONE values by resource class for these three categories of new resources to implement in the next annual auction, as well as appropriate Net ACR values for these three categories of resources that become existing resources in subsequent auctions. Contrary to PJM's position, we think it is feasible for PJM to determine those values for demand resources that rely on various types of behind-the-meter generation as a substitute for purchasing wholesale power. The scale may be different for behind-the-meter generation, but the fundamental elements of the analysis are the same. We realize that setting default offer price floor values may be more difficult for demand resources that commit to cease using wholesale power, rather than shift to behind-the-meter generation as an alternative to consuming wholesale power, and energy efficiency resources. For non-generating demand-side resources, PJM may rely on a historical averaging approach similar to the one it has already proposed for planned demand response resources to create a proxy default offer price floor,[32] recognizing that PJM may need to evaluate idiosyncratic costs for things such as lost manufacturing value when considering requests for a Unit-Specific Exemption.

14. Third, we direct PJM to include an RPS Exemption for renewable resources receiving support from state-mandated or state-sponsored RPS programs that fulfill at least one of these criteria: (1) have successfully cleared an annual or incremental capacity auction prior to this order; (2) have an executed interconnection construction service agreement on or before the date of this order; or (3) have an unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of this order.[33] We find this exemption just and reasonable because the Commission has expressly exempted those resources in the past based on the assessment that such resources had little impact on clearing prices, and the initial investments in those resources—unlike certain existing resources that new State Subsidies are designed to retain—were made in reliance on earlier Commission determinations that the limited quantity of RPS resources would not undermine the market. Going forward, however, new non-exempt renewable resources will be subject to the Net CONE default offer price floor for their specific resource type. RPS resources that become existing resources after the next annual auction, and that do not qualify under one the exemptions we have directed, will be subject to the Net ACR default offer

[32] *See* PJM Initial Testimony at 42-43 & tbl. 2.

[33] *See infra* IV.D.1.

price floor for their specific resource type. We are aware that, as a practical matter, the Net ACR default offer price floor for existing renewable resources poses no real obstacle because PJM proposed to set that value at zero.[34] On compliance, we direct PJM to provide additional justification for that determination.

15. Fourth, we direct PJM to include a Competitive Exemption for both new and existing resources , including demand-side resources, that certify they will forego any State Subsidies. This exemption is based on the competitive entry exemption the Commission accepted in 2013, prior to the orders on remand from *NRG*.[35] We think it is sufficient, at this point, to allow a new or existing resource (other than a new gas-fired resource) to avoid review of a capacity offer below the applicable default price floor if the resource certifies to PJM that it will forego any State Subsidy.

16. Fifth, we direct PJM to maintain the Unit-Specific Exemption, expanded to cover existing and new State-Subsidized Resources of all resource types, to permit any resource that can justify an offer lower than the default offer floor to submit such bids to the Market Monitor for review. We find that PJM's Unit-Specific Exemption, with the modifications described below, is an important tool for establishing just and reasonable rates. This exemption is largely based on the exemption the Commission accepted in 2011 and reaffirmed in 2013. The replacement rate adopted here is intended to promote the market's selection of the most economic resources available to serve load reliably, not to reject resources simply because they are subsidized to some degree. The review process operates as a safety valve that helps to avoid over-mitigation of resources that demonstrate their offers are economic based on a rational estimate of their expected costs and revenues without reliance on out-of-market financial support through State Subsidies.[36] The review process may also help to mitigate offers by potential new

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[34] *See* PJM Initial Testimony at 46 & tbl. 3.

[35] *See* 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 53-62; 2015 MOPR Order, 153 FERC ¶ 61,066 at PP 32-41. *But see* 2017 MOPR Remand Order, 161 FERC ¶ 61,252 at P 41 (removing the competitive entry exemption on remand from *NRG*).

[36] This assessment can be complex and must yield to some level of subjective judgment, but the financial modeling assumptions PJM proposed for calculating the Net CONE in proposed Tariff section 5.14(h)(iv)(B)(2) of its initial filing in the paper hearing appear to present a reasonable objective basis for the analysis of new entrants. These factors are: (i) nominal levelization of gross costs, (ii) asset life of 20 years, (iii) no residual value, (iv) all project costs included with no sunk costs excluded, (v) use first year revenues, and (vi) weighted average cost of capital based on the actual cost of capital for the entity proposing to build the capacity resource. PJM Initial Testimony at 42.

entrants who are less interested in following through on actual performance than reselling capacity obligations to other resources that fail to clear an auction.[37]

17. Exemptions, by definition, mean different treatment. Our decision that PJM should exempt certain existing resources by essentially grandfathering them from review is not, however, unduly discriminatory. The exemptions that we direct here are an extension or re-adoption of the *status quo ante* for many types of resources that accept the premise of a competitive capacity market,[38] have operated within the market rules as those rules have evolved over time, and made decisions based on affirmative guidance from the Commission indicating that those decisions would not be disruptive to competitive markets. This order addresses the growing impact of State-Subsidized Resources because those subsidies reject the premise of the capacity market and circumvent competitive outcomes.

## I. **Background**

18. PJM operates the largest wholesale competitive electricity market in the country, covering 13 states and the District of Columbia. To protect customers against the possibility of losing service, PJM is responsible for ensuring that its system has sufficient generating capacity to meet its resource adequacy obligations, which it does through a capacity market. PJM's capacity construct has evolved over time. The current market design, the RPM, was first approved by the Commission in 2006.[39] Under the RPM, the procurement and pricing of unmet capacity obligations is done on a multi-year forward basis through an auction mechanism.[40] Since the prices for capacity are determined in these forward auctions, the RPM construct introduced a MOPR for new resources, subject to certain conditions, to ensure these resources did not depress capacity market prices below a competitive level.[41] This MOPR did not apply to baseload resources that required more than three years to develop (nuclear, coal, integrated gasification combined cycle facilities), hydroelectric facilities, or any upgrade or addition to an existing

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[37] *See* generally Monitoring Analytics, Analysis of Replacement Capacity for RPM Commitments: June 1, 2007 to June 1, 2017 (PJM IMM Dec. 14, 2017).

[38] This Commission determined many years ago that the best way to ensure the most cost-effective mix of resources is selected to serve the system's capacity needs was to rely on competition. That model cannot work if we allow State Subsidies to distort the economic selection of adequate power supplies for the multi-state PJM region.

[39] *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079, at P 9 (2006).

[40] *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at P 6 (2006).

[41] *Id*. P 103.

generation capacity resource. Additionally, the initial MOPR included the state mandate exemption, which exempted any new entry being developed in response to a state regulatory or legislative mandate to resolve a projected capacity shortfall affecting that state in the delivery year.[42]

19. PJM's MOPR was revisited in 2008 and 2009,[43] and again in 2011, when the Commission responded to a complaint by the PJM Power Providers Group (P3) and Tariff revisions proposed by PJM to address certain procurement initiatives in New Jersey and Maryland that sought to support entry of new generation through out-of-market payments. In particular, PJM proposed to replace the state mandate exemption with a new requirement that a request for a MOPR exemption, based on state policy grounds, must be approved by the Commission pursuant to a section 206 authorization, subject to a showing that the relevant sell offer was based on new entry that is pursuant to a "state-mandated requirement that furthers a specific legitimate state objective" and that the sell offer would not "lead to artificially depressed capacity prices" or "directly or adversely impact [the Commission's] ability to set just and reasonable rates for capacity sales."[44] In the 2011 MOPR proceeding, PJM's MOPR was revised to eliminate the state mandate exemption, but the Commission rejected PJM's proposed section 206 replacement mechanism as duplicative of an aggrieved party's right to seek section 206 relief.[45] The 2011 MOPR proceeding also, among other things, accepted a unit-specific review process authorizing PJM and the IMM to review cost justifications submitted by resources whose sell offers fell below the established floor.[46] Wind and solar facilities were also added to the list of resources permitted to make zero-priced offers and upgrades and additions to existing capacity resources were no longer exempted.[47]

20. Further changes to the MOPR were made in 2013 in response to PJM's proposed Tariff revisions to address the effects of new, state-supported natural gas-fired entrants. In the 2013 MOPR proceeding, the Commission conditionally accepted PJM's proposal

[42] *Id*. P 103 n.75.

[43] *See PJM Interconnection, L.L.C.*, 123 FERC ¶ 61,037 (2008); PJM Interconnection, L.L.C., 124 FERC ¶ 61,272 (2008); *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275 (2009), *order on reh'g and compliance, PJM Interconnection*, L.L.C., 128 FERC ¶ 61,157 (2009).

[44] 2011 MOPR Order, 135 FERC ¶ 61,022 at P 125 (internal quotations omitted).

[45] 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 139.

[46] *Id*. P 242.

[47] *Id*. P 152.

to categorically exempt competitive entry and self-supply, subject to PJM's retaining the unit-specific review process, which PJM had proposed to eliminate. Under the competitive entry exemption, a market seller could qualify for exemption if it received no out-of-market funding, or if the resource received outside funding, such funds were a product of participating in a competitive auction open to all available resources.[48] The self-supply exemption exempted public power, single customer entities, and vertically integrated utilities from the MOPR, subject to certain net-short or net-long thresholds.[49] The 2013 MOPR proceeding revised the MOPR to expressly state the MOPR applied only to gas-fired resources, namely combustion turbine, combined cycle, and integrated gasification combined cycle resources.[50]

21. While these changes were initially accepted by the Commission, the United States Court of Appeals for the District of Columbia found, in July 2017, that the Commission exceeded its FPA section 205 authority in modifying PJM's proposal.[51] Accordingly, the court vacated and remanded the relevant Commission orders. On remand, the Commission rejected PJM's competitive entry and self-supply exemptions because, without the addition of the unit-specific review process, there was no means for non-exempted resources with costs lower than the default offer price floor to be considered competitive in the auction.[52] Consequently, PJM's previously approved market design, i.e., the market design in effect prior to the 2013 MOPR proceeding, was reinstated in 2017. At present, PJM's current MOPR requires that all new, non-exempted natural gas-fired resources offer at or above the default offer price floor, equal to the Net CONE for the resource type, or choose the unit-specific review process. Because only new, non-exempted natural gas-fired resources are subject to review under PJM's current MOPR, it permits zero-priced offers by nuclear, coal, integrated gasification combined cycle, wind, solar, and hydroelectric resources.[53]

22. The June 2018 Order was the next substantive order addressing PJM's MOPR. As noted in the June 2018 Order, over the last few years the PJM region has experienced a significant increase in out-of-market payments provided by states for the purpose of supporting the entry or continued operation of preferred resources that may not otherwise

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[48] 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 24, 53.

[49] *Id*. PP 25, 107.

[50] *Id*. PP 145, 166.

[51] *NRG*, 862 F.3d at 117.

[52] 2017 MOPR Remand Order, 161 FERC ¶ 61,252 at P 41.

[53] *Id*. PP 41-42.

be able to clear in the competitive wholesale capacity market. Such uneconomic entry and retention allows for the distortion of capacity market prices and compromises the ability of those prices to serve as signals for the efficient entry and exit of resources. The June 2018 Order noted that what started as limited state support for renewable resources has grown to include support for thousands of megawatts (MW) of resources ranging from small solar and wind farms to large nuclear plants. In addition, renewable generation targets for state RPS programs continue to increase.[54] Further, State Subsidies for capacity resources continue to expand to cover additional resource types based on an ever-widening scope of justifications.[55]

23. As this trend developed, the Calpine Complainants, filed a complaint in Docket No. EL16-49-000 on March 21, 2016, asserting that PJM's Tariff, specifically the MOPR, is unjust and unreasonable because it does not address the effect of subsidized resources on the capacity market. The Calpine Complainants argued that subsidized resources submit bids lower than their true costs to make sure they clear the market, thereby suppressing capacity market prices. In May 2017, during a period in which the Commission had no quorum, Commission staff conducted a technical conference to explore the impact of state subsidies on regional capacity markets. Subsequently, on April 9, 2018, PJM proposed revisions to the MOPR in Docket No. ER18-1314-000 (PJM 2018 April Filing), aimed at addressing the price impacts of state out-of-market support for capacity resources. PJM proposed two mutually exclusive alternatives: Capacity Repricing, a two-stage annual auction, with capacity commitments first determined in stage one of the auction and the clearing price set separately in stage two,

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[54] *See infra* P 175.

[55] Since the June 2018 Order, some states have also enacted new legislation to subsidize new or existing resources. *See* Ohio Clean Air Program, House Bill No. 6, 133rd Gen. Assemb., Reg. Sess. (July 23, 2019) (making numerous modifications to the Ohio Revised Code to provide subsidies for certain nuclear and coal-fired resources, effective Oct. 22, 2019); Maryland Clean Energy Jobs Act, Senate Bill No. 516, 2019 Reg. Sess. (cross-filed as H.B. 1158) (May 25, 2019) (requiring, among other things, an increase in the state's RPS target to 50% by 2030). In addition, Pennsylvania is currently considering several bills to support nuclear and renewable resources. For example, House Bill 1195 and Senate Bill 600 would increase the usage requirement of Tier 1 renewable resources in the Alternative Energy Portfolio Standards (AEPS) from 8% to 30% by 2030 and dedicate 7.5% of that target to in-state grid-scale solar and 2.5% to distributed solar generation. House Bill 11, would create a third tier for nuclear power in the state's AEPS program, from which suppliers must buy an additional 50% of their power by 2021.

and MOPR-Ex, an extension of PJM's existing MOPR to include both new and existing resources, subject to certain exemptions, including a unit-specific review process.

24. In the June 2018 Order, the Commission addressed the Calpine complaint and PJM's April 2018 filing. First, the Commission rejected PJM's Capacity Repricing proposal, finding that "it is unjust and unreasonable to separate the determination of price and quantity for the sole purpose of facilitating the market participation of resources that receive out-of-market support."[56] Second, the June 2018 Order also rejected PJM's MOPR-Ex proposal as unjust and unreasonable and unduly discriminatory. The Commission found that, while PJM's MOPR-Ex proposal would have prevented some resources, but not others, that receive certain out-of-market support from displacing competitive resources and suppressing prices, PJM failed to "provide 'a valid reason for the disparity' among resources that receive out of market support through [RPS] programs, which [we]re exempt from the MOPR-Ex proposal, and other state-sponsored resources, which [we]re not."[57]

25. Next, acting on the records of the Calpine complaint proceeding and PJM's April 2018 filing, the June 2018 Order found that PJM's existing Tariff is unjust and unreasonable because PJM's existing MOPR fails to protect the wholesale capacity market against price distortions from out-of-market support for uneconomic resources. The Commission stated that the PJM Tariff "allows resources receiving out-of-market support to significantly affect capacity prices in a manner that will cause unjust and unreasonable and unduly discriminatory rates in PJM regardless of the intent motivating the support."[58] The Commission further stated that out-of-market support by states has reached a "level sufficient to significantly impact capacity market clearing prices and the integrity of the resulting price signals on which investors and consumers rely to guide the orderly entry and exit of capacity resources."[59] The Commission explained that out-of-market support permits new and existing resources to submit low or zero priced offers into the capacity market, resulting in price distortions and cost shifts while retaining uneconomic resources.[60]

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[56] June 2018 Order, 163 FERC ¶ 61,236 at P 64.

[57] *Id*. P 100 (quoting *Black Oak Energy, LLC v. FERC*, 725 F.3d 230, 239 (D.C. Cir. 2013)).

[58] *Id*. P 156.

[59] *Id*.

[60] *Id*. PP 150, 153-55.

26. While the Commission found that PJM's Tariff was unjust and unreasonable, the Commission stated that it could not make a final determination regarding a just and reasonable replacement rate based on the record presented. The June 2018 Order preliminarily found that a replacement rate should expand the MOPR to cover out-of-market support for all new and existing resources, regardless of resource type, with few to no exemptions.[61] The June 2018 Order also proposed and sought comment on the potential use of a resource-specific FRR Alternative option as a method of accommodating resources that receive out–of–market support while protecting the integrity of the PJM capacity market for competitive resources and load.[62] The Commission initiated a paper hearing to allow the parties to submit additional arguments and evidence regarding the replacement rate.[63]

## II. Notice of Paper Hearing and Responsive Pleadings

27. Notice of the paper hearing was published in the *Federal Register*, 83 Fed. Reg. 32,113 (2018), with interventions due on or before July 20, 2018. Timely-filed motions to intervene and motions to intervene out-of-time were submitted by the entities listed in Appendix 1 to this order.[64]

28. The June 2018 Order established a paper hearing schedule with an initial round of testimony, evidence, and/or argument due within 60 days of June 2018 Order, with reply testimony due 30 days thereafter. Following a motion from the Organization of PJM States, Inc. (OPSI) to extend the testimony deadline, the Commission extended the deadline for filing initial testimony, evidence, and/or argument to October 2, 2018, with reply testimony filed November 6, 2018. Such testimony was submitted by the entities listed in Appendix 2 to this order.

29. In addition, answers were submitted by Exelon, on November 21, 2018; FirstEnergy Utilities, on November 26, 2018; Direct Energy Business Marketing, et al. and NextEra Energy Resources, LLC, and PJM, on December 6, 2018; Clean Energy Industries, on

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[61] *Id*. P 158.

[62] *Id*. PP 160-61.

[63] *Id.* PP 8, 149, 157, 164-72.

[64] For a listing of previously granted interventions in this proceeding, *see* June 2018 Order, 163 FERC ¶ 61,236 at App. 1 & App. 2.

December 20, 2018;[65] Union of Concerned Scientists, on December 26, 2018; PSEG Companies, on December 28, 2018 and August 20, 2019; PJM Industrial Customer Coalition, on January 15, 2019; Joint Consumer Advocates, on April 2, 2019;[66] and LS Power Associates, L.P., in the form of Motions to Lodge, on April 5, 2019 and August 16, 2019. Joint Stakeholders filed reply comments to PSEG's August 20, 2019 comments on August 23, 2019. AEP and Duke filed reply comments to LS Power's August 16, 2019 motion to lodge on August 29, 2019.

## III. <u>Procedural Matters</u>

30. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. In addition, pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2019), the Commission will grant the unopposed late-filed motions to intervene, given the parties' interest in this proceeding, the early stage of the proceeding, and the absence of any undue prejudice or delay.

31. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits an answer unless otherwise ordered by the decisional authority. We accept the answers filed by Exelon, FEU, Joint Parties, PJM, Clean Energy Industries, UCS, PSEG, PJM-ICC, Joint Stakeholders, AEP/Duke, Joint Consumer Advocates, and LS Power, because they have assisted us in our decision-making process.

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[65] Clean Energy Industries is comprised of the following entities: the American Wind Energy Association; the Solar RTO Coalition; and the Solar Energy Industries Association.

[66] Joint Consumer Advocates is comprised of the following entities: Illinois Citizens Utility Board; West Virginia Consumer Advocate Division; Delaware Division of the Public Advocate; Maryland Office of People's Counsel; and the Office of the People's Counsel for the District of Columbia.

# IV. Discussion

## A. Expanded MOPR

### 1. Replacement Rate Expanded MOPR

32. In the June 2018 Order, the Commission preliminarily found that PJM should expand the MOPR to cover out-of-market support to all new and existing resources, regardless of the resource type, with few or no exceptions.[67] We reaffirm that finding.

#### a. Intervenor Positions

33. Multiple intervenors support an expanded MOPR with few or no exemptions.[68] Some argue that, because all resources receiving out-of-market support at least in theory have the ability to submit low offer prices in the capacity market, regardless of the nature or purpose of the out-of-market support they receive, an expanded MOPR should extend to any and all capacity resources that receive out-of-market support, without exception.[69] Several intervenors contend that exemptions to the MOPR would be contrary to the goals and policy described in the June 2018 Order, including that states must bear the cost of their own actions.[70]

34. Conversely, other intervenors oppose an expanded MOPR.[71] The Illinois Attorney General argues that PJM's existing MOPR rules and definitions, which it contends were

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[67] June 2018 Order, 163 FERC ¶ 61,236 at P 158.

[68] *See, e.g.*, ACCCE/NMA Initial Testimony at 3-4; API Initial Testimony at 21-22; Brookfield Initial Testimony at 2, 6; LS Power Initial Testimony at 7-8; NEI Initial Testimony at 5; NRG Initial Testimony at 8; Ohio Commission Initial Testimony at 2; P3 Initial Testimony at 9-11; Starwood Initial Testimony at 2-3; Vistra Reply Testimony at 7-8, Russo Reply Aff. at 29.

[69] *See, e.g.*, NEI Initial Testimony at 5; API Initial Testimony at 20; Exelon Initial Testimony at 17; LS Power Initial Testimony at 9.

[70] API Initial Testimony at 21-22; Exelon Initial Testimony at 6 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 162); Exelon Reply Testimony at 56; LS Power Initial Testimony at 9-10.

[71] *See, e.g.*, ELCON Initial Testimony at 2-4, 7; IMEA Reply Testimony at 4; Policy Integrity Initial Testimony at 6-16 (arguing an expanded MOPR without an accommodation mechanism is not just and reasonable); Joint Consumer Advocates Initial

designed to address monopsony power, are not the best model to achieve the Commission's goal in this proceeding.[72] Some intervenors also argue that expanding the MOPR will increase costs to load by elevating offers above competitive levels,[73] especially in zones where one generator has substantial market power,[74] or by causing PJM to over-procure capacity.[75] Policy Integrity argues that excess capacity is undesirable and may lead to consumers paying twice for available capacity, while lowering energy market prices.[76] Policy Integrity contends that lower energy prices could lead to inflated capacity market prices, if resources were required to bid higher to recover their costs.[77]

35. Some intervenors argue that an expanded MOPR could increase the risk of market participants exercising supplier-side market power, because it would reduce the number of bidders in price ranges below the default offer price floors, as well as the opportunity cost of withholding capacity.[78] The Illinois Attorney General submits that a supplier with market power could be incentivized to bid a subsidized resource high to increase the clearing price for its other, non-subsidized units, but the MOPR only addresses incentives to bid a resource below cost.[79] As such, the Illinois Attorney General urges the Commission to adopt rules that consider whether a subsidized resource is "part of an

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Testimony at 2; New Jersey Board Reply Testimony at 4; Illinois Commission Initial Testimony at 3.

[72] Illinois Attorney General Initial Testimony at 10.

[73] ELCON Initial Testimony at 4.

[74] Illinois Attorney General Initial Testimony at 13. The Illinois Attorney General argues that there are not enough resources in ComEd for the zone to clear without some of Exelon's nuclear units clearing, and accuses Exelon of withholding capacity to raise the zonal clearing price. Illinois Attorney General Initial Testimony at 8; *see also* PJM Consumer Representatives Reply Testimony at 17 (agreeing with the Illinois Attorney General that the capacity market is subject to excessive market power and urging the Commission to consider this in its determination).

[75] Policy Integrity Initial Testimony at 7, 12.

[76] *Id.* at 13.

[77] *Id*.

[78] *Id*. at 7, 15-16; Clean Energy Advocates Reply Testimony at 4.

[79] Illinois Attorney General Initial Testimony at 13.

organization (1) that does not have any interest in reducing capacity prices due to its ownership of other resources that receive capacity revenues, and (2) that can exercise market power in the capacity market."[80] Finally, the Illinois Attorney General asserts that the Commission should require release of bidding data for any auction in which resources subject to the new MOPR participate to the Market Monitor, as well as requesting state commissions, state attorneys general, and state utility consumer representatives, to provide transparency and ensure that the exercise of market power and unjust and unreasonably high prices are not an unintended consequence of the MOPR.[81]

36. Joint Consumer Advocates state that the application of an expanded MOPR could substantially impact the ability of vertically integrated states to continue to participate in PJM's capacity market.[82] Joint Consumer Advocates further state that, while applying the MOPR to self-supply resources in regulated states would result in unjust and unreasonable rates, there is no rational distinction in applying the MOPR to resources receiving out-of-market payments but not to self-supply, which also receive out-of-market cost recovery.[83]

### b. Commission Determination

37. We find that an expanded MOPR that applies to new and existing capacity resources that receive, or are entitled to receive, a State Subsidy, unless the resource qualifies for an exemption, as discussed below, is a just and reasonable means to address State Subsidies.[84] PJM's existing MOPR fails to consider whether resource types other than new natural gas-fired resources are offering competitively in the capacity market without the influence of State Subsidies. The record in this proceeding indicates that State Subsidies for both existing and new resources are increasing, especially out-of-

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[80] *Id*. at 9.

[81] *Id*. at 14.

[82] Joint Consumer Advocates Initial Testimony at 13; Joint Consumer Advocates Reply Testimony at 6-7.

[83] Joint Consumer Advocates Reply Testimony at 6.

[84] PJM Tariff, App. DD, § 1 (stating, among other things, that the RPM provides the forward commitment of resources to ensure reliability in future delivery years); *see also* CASPR Order, 162 FERC ¶ 61,205 at P 21 (a capacity market should "produce a level of investor confidence that is sufficient to ensure resource adequacy at just and reasonable rates").

38. market state support for renewable and nuclear resources.[85] The June 2018 Order thus found PJM's existing MOPR provisions unjust and unreasonable and unduly discriminatory because they failed to protect the "integrity of competition in the wholesale capacity market against unreasonable price distortions and cost shifts caused by out-of-market support to keep existing uneconomic resources in operation, or to support the uneconomic entry of new resources, regardless of generation type or quantity of the resources supported by such out-of-market support."[86]

39. In response to arguments that PJM's MOPR was designed to address monopsony power and is therefore not well suited to address State Subsidies, we disagree. A purpose of the MOPR has been to address price suppression.[87] Consistent with that policy, the Commission accepted PJM's proposal to eliminate the state mandate exemption in 2011, because state sponsorship of uneconomic new entry can produce unjust and unreasonable rates by artificially suppressing capacity prices.[88] This order does not, therefore, change the purpose of the MOPR, but only changes its scope in response to new efforts to provide State Subsidies to existing resources, or increased support for other types of new resources, that threaten to depress market clearing prices below competitive levels. If a seller believes that the default offer price floor for its resource type is not representative of its resource's costs, the seller may apply for a Unit-Specific Exemption, as described below (see IV.D.5).

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[85] *See* June 2018 Order, 163 FERC ¶ 61,236 at PP151-155 (discussing evidence of growing state subsidies); *see also* Calpine Initial Comments at 3. States have also passed bills subsidizing resources since the June 2018 Order. *See supra* note 55 (describing recent legislation).

[86] June 2018 Order, 163 FERC ¶ 61,226 at P 150.

[87] *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 at P 34 (explaining that the MOPR would apply to sellers that "may have incentives to depress market clearing prices below competitive levels").

[88] *E.g.*, 2011 MOPR Order, 135 FERC ¶ 61,022 at P 141 (accepting PJM's proposal to eliminate the state mandate exemption, stating that uneconomic entry can produce unjust and unreasonable rates by artificially suppressing capacity prices), *aff'd sub nom. NJBPU*, 744 F.3d at 97-102.

40. We further disagree with intervenors that an expanded MOPR will increase the risk of market participants exercising supplier-side market power. This speculative concern is not sufficiently supported in the record of this proceeding. Further, there are existing provisions in PJM's Tariff to address supplier-side market power. We also reject Illinois AG's proposal to require the release of offer data. Offer data is sensitive commercial information, which we decline to make generally available.[89]

41. As to arguments that an expanded MOPR will unjustly and unreasonably increase costs to consumers, courts have directly addressed this point, holding that states "are free to make their own decisions regarding how to satisfy their capacity needs, but they 'will appropriately bear the costs of [those] decision[s],' . . . including possibly having to pay twice for capacity."[90] States have the right to pursue policy interests in their jurisdictions. Where those state policies allow uneconomic entry into the capacity market, the Commission's jurisdiction applies, and we must ensure that wholesale rates are just and reasonable.[91] The replacement rate directed in this order will enable PJM's capacity market to send price signals on which investors and consumers can rely to guide the orderly entry and exit of economically efficient capacity resources.

42. Finally, while this order largely focuses on the changes we are requiring to PJM's MOPR, we clarify that the MOPR will continue to apply to new natural gas-fired combustion turbine and combined cycle resources. Although the June 2018 Order focused on State Subsidies, the order nonetheless recognized that new natural gas-fired resources remain able to suppress capacity prices.[92] We find that this record has not demonstrated a need to eliminate the existing MOPR and so the MOPR should continue to apply to new natural gas-fired resources, regardless of whether they receive State Subsidies.

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[89] *See, e.g.*, 5 U.S.C. § 552(b)(4) (2018) (exempting from mandatory disclosure trade secrets and confidential commercial and financial information); 18 C.F.R. § 388.107(d) (2019)..

[90] *NJBPU*, 744 F.3d at 96-97 (quoting *Connecticut PUC*, 569 F.3d at 481).

[91] *See NJBPU*, 744 F.3d at 100 (affirming the Commission's decision to eliminate the state mandate exemption because "below-cost entry suppresses capacity prices…[the Commission is] statutorily mandated to protect the [PJM capacity auction] against the effect of such entry"); *see also supra* note 23 (listing relevant Commission and judicial precedent).

[92] June 2018 Order, 163 FERC ¶ 61,236 at PP 151, 155.

### 2. Resources Subject to the Expanded MOPR

#### a. PJM's Proposal

43. PJM proposes that demand resources and generation capacity resources, existing and planned, internal and external, that meet certain materiality criteria will be considered material resources that are subject to the MOPR.[93] PJM also proposes a number of exclusions. PJM proposes to exclude a generation resource for which "electricity production is not the primary purpose of the facility at which the energy is produced, but rather . . . is a byproduct of the resource's primary purpose."[94] PJM notes that such resources include those fueled by landfill gas, wood waste, municipal solid waste, black liquor, coal mine gas, or distillate fuel oil. PJM asserts that it is appropriate to exempt such resources because energy production is only a byproduct of these resources' primary economic purpose.[95] PJM also proposes to exclude energy efficiency resources, asserting that energy efficiency "resources are generally the result of a focus on reduced consumption and energy conservation, which are on the demand side of the equation, and do not raise price suppression concerns."[96]

#### b. Intervenor Positions

44. With regard to PJM's proposal to exclude resources whose primary purpose is not energy production, some intervenors support PJM's proposal.[97] For example, Microgrid requests that PJM's proposed exemption be expanded to cover any resource with a primary purpose other than the production of wholesale electricity (i.e., sale for resale), arguing that microgrid operations often reflect a combination of purposes, with wholesale

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[93] PJM Initial Testimony at 15; proposed Tariff, Att. DD, § 5.14(h)(ii)(a). PJM's proposed materiality thresholds are discussed *infra* IV.B.

[94] *Id*. at 19.

[95] *Id*.

[96] *Id*. at 15 n.20; *see* proposed Tariff at Att. DD, § 5.14(h)(ii)(A) (limiting the term Capacity Resource with Actionable Subsidy, in relevant part, to a "Demand Resource or a Generation Capacity Resource, or uprate or planned uprate, to a Generation Capacity Resource[.]").

[97] PJM Consumer Representatives Reply Testimony at 5-6; IMEA Reply Testimony at 12.

power production as "value added" to those purposes.[98] At a minimum, Microgrid requests that the asset-backed demand resources such as microgrids be included in the exemption for resources for which electricity production is not the primary purpose of the facility.[99] Others oppose PJM's proposed exemption for resources not primarily engaged in energy production.[100] Joint Consumer Advocates argue that the purpose for which a facility exists is irrelevant to whether it poses a price suppression risk.[101]

45. AEE argues that seasonal resources should be exempt from the MOPR, because they have different economics than annual capacity resources and do not rely on clearing the capacity market to enter the PJM market or to stay in operation.[102] AEE contends that these resources have widely varying business models and reasons for offering at a certain level, and that, as such, it would be difficult to develop a reasonable default offer price floor to apply.[103] Further, AEE contends that the decision to offer seasonally and forgo six months of capacity revenue indicates that these resources are economic based on their revenue from other markets.[104]

46. DC Commission argues that seasonal demand response should be exempt from the MOPR because it is not a Capacity Performance resource.[105] To the extent some of its demand response is subject to the MOPR because it matches in the capacity auction to become an annual product, DC Commission requests the Commission exempt it from the

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[98] Microgrid Reply Testimony at 13. These purposes may include: "cost effective self-supply, thermal and electric applications, the ability to island included load and the related resiliency benefits, and environmental performance." *Id*.

[99] *Id*.

[100] Talen Reply Testimony at 5; *see also* Joint Consumer Advocates Reply Testimony at 5-6.

[101] Joint Consumer Advocates Reply Testimony at 5-6.

[102] AEE Initial Testimony at 23; *see also* Maryland Commission Reply Testimony at 9.

[103] AEE Initial Testimony at 24.

[104] *Id*. at 24-25.

[105] DC Commission Initial Testimony at 4; *see also* Maryland Commission Initial Testimony at 12.

47. MOPR.[106] DC Commission submits that almost all PJM states have demand response programs that partially rely on PJM's capacity market as a benefit, and subjecting these programs to a MOPR would increase prices in the long term.[107] The Maryland Commission similarly argues that seasonal resources should be exempt because the total amount of winter-only capacity resources that typically aggregate with summer-only demand response and energy efficiency capacity resources is low RTO-wide and would strand these summer capacity resources, which are important elements of federal and state energy policies. The Maryland Commission thus requests that resources that offer capacity into the BRA for the purpose of aggregating with seasonal resources should be exempt from the MOPR.[108]

48. In response to the Maryland Commission's request, PJM asserts that seasonal aggregated resources, which are currently composed entirely of wind resources, should be able to clear the BRA because PJM's proposed default offer price floor for existing wind resources is zero dollars. PJM further submits that the appropriate place to address the aggregation of seasonal resources is in Docket Nos. EL17-32-000 and EL17-36-000.[109]

49. Some intervenors argue that first-of-a-kind technologies should be exempt from the MOPR.[110] The Maryland Commission asserts that subsidized emerging technologies have the potential to pave the way for other future developments that could spur competition and benefit ratepayers across the PJM region without the need for further subsidization.[111] The Maryland Commission contends that such projects are few and merit exemption from a MOPR.[112] The Maryland Commission argues that, because such subsidies are not specifically targeted for the interest of the sponsoring state and provide benefits to the entire PJM region, the Commission should allow an RTO-wide exemption for the first 375 MW, per resource type, of all planned or existing resources that are first-

[106] DC Commission Initial Testimony at 5; *see also* DC Consumers Counsel Initial Testimony at 10-11.

[107] DC Commission Initial Testimony at 7.

[108] Maryland Commission Initial Testimony at 12.

[109] PJM Reply Testimony at 16.

[110] DC People's Counsel Initial Testimony at 10-11; Maryland Commission Initial Testimony at 12-13; Joint Consumer Advocates Initial Testimony at 14.

[111] Maryland Commission Initial Testimony at 12-13.

[112] *Id*. at 13.

of-a-kind developments in PJM.[113] The Maryland Commission asserts that a total amount of 375 MW will have a *de minimis* impact on PJM's capacity market and could serve to fuel future competition that is valued in competitive markets.[114] The Joint Consumer Advocates support an exemption for innovative technology up to 350 MW.[115] AEE agrees that a broadly expanded MOPR could prevent new advanced energy technologies from participating in the markets and create disincentives to innovation.[116]

### c. **Commission Determination**

50. We find that PJM must apply the MOPR to all new and existing, internal and external, State-Subsidized Resources that participate in the capacity market, regardless of resource type, with certain exemptions described *infra* section IV.D.[117]

51. We disagree that capacity resources that receive or are entitled to receive a State Subsidy and whose primary purpose is not electricity production should be categorically exempt from the MOPR. We find no reason to distinguish capacity resources based on whether they primarily exist to produce energy or produce energy as a byproduct of another function, like burning waste.[118] The type of resource is immaterial if the resource receives a State Subsidy and thus has the ability to suppress capacity prices.

52. We find that seasonal resources are properly considered capacity resources and should be subject to the MOPR if they receive or are entitled to receive a State Subsidy and do not qualify for one of the exemptions discussed in this order. A seasonal resource receiving a State Subsidy has the same ability to affect capacity prices as other State-Subsidized Resources and thus there is no reason to distinguish between resources. We disagree with AEE that PJM's Tariff should exempt seasonal resources from the MOPR because their widely varying business models may make it administratively difficult to develop an appropriate default offer price floor to be applied to these resources. We

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[113] *Id*.

[114] *Id*.

[115] Joint Consumer Advocates Initial Testimony at 14.

[116] AEE Initial Testimony at 5.

[117] June 2018 Order, 163 FERC ¶ 61,236 at P 158. Capacity resource, as used in this order, means all resource types that seek to participate in PJM's capacity market.

[118] However, as discussed *infra*, federally-mandated sales of energy and capacity by Qualifying Facilities do not fall under our defined term of State Subsidy. S*ee infra* note 143.

address default offer price floors in IV.C below. If a seasonal resource is able to make an economic offer without reliance on a State Subsidy, that resource may apply for the Unit-Specific Exemption, or it may forego any State Subsidy to qualify for the Competitive Exemption.

53. We also find it is unnecessary to categorically exempt seasonal resources that receive or are entitled to receive State Subsidies based on AEE's characterization of seasonal resources as categorically "economic" because they forego six months of capacity market income or otherwise do not rely on capacity market revenues to stay in business. Rather, AEE's argument only demonstrates that no separate exemption is needed, because such a resource could qualify for a Unit-Specific Exemption, or it may forego any State Subsidy to qualify for the Competitive Exemption. Nor are we persuaded that seasonal resources should be exempt from the MOPR either because the total MW level of winter-only capacity resources that aggregate is low or that seasonal demand response resources are not Capacity Performance resources. As the purpose of the expanded MOPR is to limit the influence of State Subsidies on PJM's multi-state wholesale capacity market, we affirm that each capacity resource with a State Subsidy—including seasonal resources—must be subject to an appropriate default offer price floor for its resource type unless it qualifies for one of the exemptions discussed in this order.

54. We disagree with PJM's proposal to exclude energy efficiency resources while also proposing to include demand resources. PJM provides no rationale for treating these resource types differently with respect to the expanded MOPR, as both modify demand and are represented on the supply side. We therefore find that the expanded MOPR should apply to energy efficiency resources, as well as demand response, when either of those types of resources receive or is entitled to receive a State Subsidy, unless they qualify for one of the exemptions described in this order. We also find that capacity storage resources and emerging technology should be subject to the applicable default offer price floor if they receive, or are entitled to receive a State Subsidy, unless they qualify for one of the exemptions described in this order. We address the specific default offer price floors for these resources in section IV.C. However, as discussed in section IV.D below, we direct PJM to include an exemption for existing demand response, energy efficiency, and capacity storage resources. All resources that participate in the PJM capacity market – including demand response, energy efficiency, storage, cogeneration, and seasonal resources – can impact the competitiveness of the capacity market and the resource adequacy it was designed to address.

### 3. Subsidies Subject to the Expanded MOPR

#### a. PJM's Proposal

55. Subject to certain exemptions addressed below, PJM proposes to subject resources receiving a Material Subsidy to the MOPR. PJM proposes to define a "Material Subsidy" to include: "(1) material payments, concessions, rebates, or subsidies as a result of any

state-governmental action connected to the procurement of electricity or other attribute from an existing Capacity Resource, or the construction, development, or operation, (including but not limited to support that has the effect of allowing the unit to clear in any [PJM capacity auction]) of a Capacity Resource, or (2) other material support or payments obtained in any state-sponsored or state-mandated processes, connected to the procurement of electricity or other attribute from an existing Capacity Resource, or the construction, development, or operation, (including but not limited to support that has the effect of allowing the unit to clear in any [PJM capacity auction]), of the Capacity Resource."[119]

56. PJM further proposes to apply its expanded MOPR to internal and external capacity resources receiving state subsidies where the relevant seller, among other things, "is entitled to a Material Subsidy with regard to such Capacity Resource and the [seller] has not certified that it will forego receiving any Material Subsidy for such Capacity Resource during the applicable Delivery Year, or the [seller] has received a Material Subsidy with regard to such Capacity Resource and yet to clear any RPM Auction since it received Material Subsidy."[120]

57. In its Answer, PJM asserts that, under its proposed definition of a subsidy subject to the expanded MOPR, the subsidy need not be explicitly stated or captured in a distinct rate; the expanded MOPR, rather, would cover any state-directed procurement that includes a non-bypassable charge or other rate to retail customers imposed by law or regulation.[121] PJM also clarifies that a bilateral transaction for capacity and/or other attributes that is not state-directed and/or that does not result in a non-bypassable charge to consumers would not be considered a Material Subsidy.[122]

### b. <u>Intervenor Positions</u>

58. Several intervenors argue that PJM's MOPR should be targeted to only address resources and subsidies that intend to suppress, or are capable of suppressing, market clearing prices.[123] Some intervenors argue similarly that the MOPR should only target

[119] PJM Initial Testimony at 19-20; *see* proposed Tariff, § 1 – New Definitions (Material Subsidy). We address PJM's proposed provisions with respect to federal subsidies *infra* IV.A.5.

[120] PJM Initial Testimony at 25-28; *see* proposed Tariff, Att. DD, § 5.14(h)(vi).

[121] PJM Answer at 18.

[122] *Id*. at 20-21.

[123] *See, e.g.*, Brookfield Reply Testimony at 6-7.

subsidies that have been shown to materially affect capacity offers,[124] or only address those subsidies that affect the market in the manner suggested in the June 2018 Order, meaning subsidies provided by states for the purpose of supporting the entry or continued operation of preferred generation resources that may not otherwise be able to succeed in a competitive wholesale capacity market.[125]

59. Clean Energy Industries argue that state policies that utilize competitive bidding processes should not be considered "actionable subsidies" because such competitive processes do not create revenue certainty and do not reasonably impact capacity market bidding behavior.[126] Similarly, AEE argues that a MOPR exemption should be provided for capacity resources that receive out-of-market revenues through a state policy or program that selects resources through a competitive process, including resources winning an all-source, technology-neutral request for proposals that meets the Commission's previously-established standards for competitive solicitations.[127]

60. ELCON argues that if the Commission pursues an expanded MOPR, it should limit the qualifying characteristics of an actionable subsidy only to the types and degrees of subsidization that fundamentally compromise competitive markets.[128] ELCON suggests actionable subsidies should be: (i) government sanctioned payments funded by compulsory charges on electricity consumers; (ii) guaranteed payments (i.e., not obtained through a competitive program); and (iii) resource- or company-specific payments.[129]

61. AEP/Duke argue that the retail rider approved by the Ohio Commission for AEP's affiliate and the Dayton Power & Light Company, and a pending retail rider for Duke's

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[124] *See, e.g.*, AEE Initial Testimony at 9; Clean Energy Industries Initial Testimony at 3; OPSI Initial Testimony at 14; AEP/Duke Reply Testimony at 10-12; ELCON Initial Testimony at 5-6.

[125] AEP/Duke Initial Testimony at 4 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 1); *see also* AEE Initial Testimony at 3; Clean Energy Industries Reply Testimony at 4.

[126] Clean Energy Industries Initial Testimony at 21.

[127] AEE Initial Testimony at 22.

[128] ELCON Initial Testimony at 5.

[129] *Id*. at 5-6.

affiliate, should not be treated as a subsidy that is subject to PJM's MOPR.[130] AEP/Duke assert that the retail rate riders are not a subsidy because they are not related to any state policy goals support the entry or continued operation of preferred generating resources.[131]

62. Some intervenors support PJM's proposal to apply the expanded MOPR to resources that are "entitled to a Material Subsidy[.]"[132] Other intervenors oppose PJM's proposal. Avangrid argues that focusing on an entitlement to receive a Material Subsidy would inappropriately extend the MOPR to resources that do not actually receive a Material Subsidy. Avangrid further asserts that such a definition fails to comply with the requirements of the June 2018 Order, which uses some form of the verb "receive" in discussing out-of-market revenue or state support.[133] Several intervenors argue that the language will permit over-mitigation because resources may be eligible for a subsidy but not guaranteed to receive it.[134]

63. Other intervenors assert that a resource that receives an actionable subsidy after the window to certify that it is receiving such a subsidy should be permitted to participate in the BRA as if it did not receive the actionable subsidy, as such a resource would lack adequate time to prepare to be an RCO resource.[135]

64. The Joint Consumer Advocates state that, if the MOPR is expanded, it should apply only to resources that are receiving support or have received assurances of support and only for the duration of time that they are receiving qualifying payments.[136]

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[130] AEP/Duke Initial Testimony at 5; AEP/Duke Reply Testimony at 12-15; *see also* Buckeye Reply Testimony at 7-8 (agreeing that the retail rate riders simply continue the long-standing and unique OVEC arrangements, which are largely owned by self-supply entities).

[131] AEP/Duke Initial Testimony at 6.

[132] *See, e.g.*, API Reply Testimony at 21-22; New Jersey Board Reply Testimony at 16-17; Policy Integrity Initial Testimony at 6.

[133] Avangrid Initial Testimony at 11-12.

[134] *Id.* at 17; Avangrid Reply Testimony at 17-18; DC People's Counsel Initial Testimony at 8; Clean Energy Industries Reply Testimony at 14-15; Clean Energy Industries Initial Testimony at 17-18 (arguing speculative revenues do not materially impact offers).

[135] PSEG Reply Testimony at 17-18; New Jersey Board Initial Testimony at 21.

[136] Joint Consumer Advocates Initial Testimony at 8-9, 11.

65. Some intervenors argue that out-of-market subsidies should exclude purely private and voluntary transactions, including voluntary bilateral capacity contracts outside the market.[137] Illinois Commission recommends that the Commission not treat payments, assurances, or other such benefits provided by taxpayers, rather than by electricity consumers, as actionable subsidies.[138]

66. Policy Integrity argues that revenue resources receive from externality payments, such as ZEC and RPS programs, are not distinguishable from other revenues received outside of the markets, including coal ash sales, steam heat sales, voluntary Renewable Energy Credits (RECs), emission allowances, or fossil fuel subsidies. Policy Integrity argues that these sources of revenue compensate resources for products and services that are not FERC-jurisdictional, just as RPS and ZEC programs do, and affect capacity market bidding behavior the same way as other out-of-market revenue, but have coexisted with capacity markets for years.[139] Policy Integrity contends the Commission has recognized that revenues a resource receives outside of jurisdictional markets are not necessarily distortionary.[140] Because revenues from RPS programs and ZECs are similar to the payments the Commission has found are not distortionary, Policy Integrity argues they should be treated in the same way.[141]

#### c. <u>Commission Determination</u>

67. Based on the evidence presented in this paper hearing, we find that PJM's MOPR must be expanded to permit the review and mitigation of capacity offers by resources that receive or are eligible to receive State Subsidies.[142] Specifically, the term State Subsidy will be defined as follows:

> A direct or indirect payment, concession, rebate, subsidy, non-bypassable consumer charge, or other financial benefit that is (1) a

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[137] Illinois Commission Reply Testimony at 22-23; ELCON Initial Testimony at 7 (noting that corporate consumers are increasingly deploying their own capital to voluntarily purchase power through the bilateral market or procure RECs); AES Initial Testimony at 19-20.

[138] Illinois Commission Reply Testimony at 22.

[139] Policy Integrity Initial Testimony at 27-33.

[140] *Id.* at 32-33 (citing 2011 MOPR Order, 137 FERC ¶ 61,145 at PP 242-44).

[141] *Id.* at 33.

[142] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 158.

> result of any action, mandated process, or sponsored process of a state government, a political subdivision or agency of a state, or an electric cooperative formed pursuant to state law, and that (2) is derived from or connected to the procurement of (a) electricity or electric generation capacity sold at wholesale in interstate commerce, or (b) an attribute of the generation process for electricity or electric generation capacity sold at wholesale in interstate commerce, or (3) will support the construction, development, or operation of a new or existing capacity resource, or (4) could have the effect of allowing a resource to clear in any PJM capacity auction.[143]

68. This definition focuses on those forms of "out-of-market payments provided or required by certain states"[144] that, even in the absence of facial preemption under the FPA, squarely impact the production of electricity or supply-side participation in PJM's capacity market by "supporting the entry or continued operation of preferred generation resources that may not otherwise be able to succeed in a competitive wholesale capacity market."[145] This definition is not intended to cover every form of state financial assistance that might indirectly affect FERC-jurisdictional rates or transactions; nor is it intended to address other commercial externalities or opportunities that might affect the economics of a particular resource. Rather, our concern is with those forms of State Subsidies that are not federally preempted, but nonetheless are most nearly "directed at"[146] or tethered to[147] the new entry or continued operation of generating capacity in the federally-regulated multi-state wholesale capacity market administered by PJM. Consistent with court precedent, a State Subsidy need not be facially preempted to

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[143] Although the Public Utility Regulatory Policies Act of 1978 (PURPA) is implemented by states, it is implemented pursuant to federal law and the Commission's regulations and thus federally-mandated sales of energy and capacity by Qualifying Facilities do not fall under our defined term of State Subsidy.

[144] June 2018 Order at P 1 & n.1.

[145] *Id*.

[146] *Oneok, Inc. v. Learjet, Inc.*, 135 S. Ct. 1591, 1602 (2015).

[147] *Cf. Hughes*, 136 S. Ct. at 1299 (2016) ("Nothing in this opinion should be read to foreclose Maryland and other States from encouraging production of new or clean generation through measures 'untethered to a generator's wholesale market participation.'") (citation omitted).

require corrective action by this Commission.[148] As we have explained, our statutory mandate requires the Commission to intervene "when subsidized [resources] supported by one state's or locality's policies has the effect of disrupting the competitive price signals that PJM's [capacity auction] is designed to produce, and that PJM as a whole, including other states, rely on to attract sufficient capacity."[149]

69. For similar reasons, we disagree with Policy Integrity's argument that revenues they describe as externality payments, such as ZEC and RPS programs, are not distinguishable from certain other revenues received outside of the markets. We reiterate that if an out-of-market payment meets the definition of State Subsidy above—including ZEC and RPS programs— then the State-Subsidized Resource is subject to the default offer price floor. The definition of State Subsidy we adopt here—which leans heavily on language the PJM stakeholders reviewed and developed—is sufficiently clear and specific to be understood by PJM and its stakeholders.[150]

70. As to whether private, voluntary bilateral transactions might raise inappropriate subsidy concerns, we find that the record in the instant proceeding does not demonstrate a need to subject voluntary, arm's length bilateral transactions to the MOPR at this time.[151] We find that the expanded MOPR, as adopted herein, will sufficiently address resources receiving State Subsidies to keep existing uneconomic resources in operation, or to support the uneconomic entry of new resources.

71. We reject AEP/Duke's request to exclude retail rate-riders as a State Subsidy.[152] As described by AEP/Duke, the state-approved rate riders pass through the costs, or credits, associated with a wholesale purchase power agreement based on revenues from

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[148] *See Elec. Power Supply Ass'n v. Star*, 904 F.3d 518, 524 (7th Cir. 2018) (holding that the Illinois ZEC program is not preempted and explaining that this holding did not change whether, in this replacement rate proceeding, the Commission may "need to make adjustments in light of states' exercise of their lawful powers").

[149] 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 3; *see supra* note 23 (listing cases).

[150] In addition, several of the items listed by Policy Integrity are addressed separately by our specific holdings with respect to voluntary RECs, *see infra* P 176, and federal subsidies, *see supra* P 10; *infra* P 89.

[151] The treatment of voluntary REC arrangements under the expanded MOPR is discussed in IV.D.1 below.

[152] Unless such resource receiving the retail rate rider qualifies for an exemption.

the PJM capacity market.[153] As a general matter, we find that it is reasonable to include non-bypassable revenue arrangements or rate riders as State Subsidies because the riders are connected to the procurement of electricity or electric generation capacity sold at wholesale or support the construction, development, or operation of new and existing capacity resources.

72. We reject intervenors' argument that mitigation under the expanded MOPR should only be triggered if the out-of-market support received by a resource can be demonstrated to actually allow a resource to uneconomically enter or remain in the market, thereby suppressing prices. Consistent with Commission precedent, the June 2018 Order is premised on the finding that, as a general matter, resources receiving out-of-market support are capable of suppressing market prices.[154] We continue to uphold that finding here. It would turn that finding on its head to require PJM and the Market Monitor to determine for each and every resource receiving a State Subsidy whether that subsidy actually allows a resource to uneconomically enter or remain in the market, thereby allowing the resource to suppress prices.

73. However, we agree with intervenors who argue that the MOPR should take into account the competitiveness of State-Subsidized Resources. It will. A resource can demonstrate that its offer is competitive through the Unit-Specific Exemption (see *infra* IV.D.5) process, or certify to PJM that will forego any State Subsidy under the Competitive Exemption (see *infra* IV.D.1). Because the goal of the MOPR is to ensure that resources offer competitively, and a seller may avail itself of the Unit-Specific Exemption process or the Competitive Exemption, it is reasonable to require all resources that receive a State Subsidy to be subject to the MOPR.

74. We agree with intervenor arguments that state policies that utilize competitive bidding processes may not necessarily undermine the market's reliance on competitive price signals to procure economic capacity, and we find that the Unit-Specific Exemption is sufficient to address this scenario. A competitive, fuel-neutral process is designed to select the most economic resources. These resources should already be economic and therefore do not need an exemption. Sellers with resources chosen through such a process will be able to use the Unit-Specific Exemption to demonstrate that their offer is competitive. It is not necessary to create another administrative process to determine which state procurements are competitive in advance–the burden of demonstrating the competitiveness of a given resource's offer should fall on the seller.

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[153] AEP/Duke Initial Testimony at 5-6.

[154] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 155 (citing *ISO New England Inc.*, 135 FERC ¶ 61,029, at PP 170-71 (2011)).

75. We agree with PJM that the MOPR should apply to resources that receive or are "entitled to" receive a State Subsidy. We agree with PJM that a seller shall be considered "entitled to" a State Subsidy if the seller has a legal right or a legal claim to the subsidy, regardless of whether the seller has yet to actually receive the subsidy. We further find that a capacity resource should be considered to be entitled to receive a State Subsidy if the resource previously received a State Subsidy, and has not cleared a capacity auction since that time.

76. We disagree with intervenors' claim that it is inappropriate to mitigate resources that are entitled to a State Subsidy, but may not have actually received a State Subsidy yet. Resources that do not wish to be mitigated or believe they will not actually receive a State Subsidy to which they are entitled may certify to PJM that they will forego any State Subsidy under the Competitive Exemption. Therefore, mitigating offers by resources that receive or are entitled to receive a State Subsidy will only capture resources that are both eligible to receive a subsidy and likely to accept one.

77. Intervenors argue that resources may be entitled, but not guaranteed, to receive payments and should therefore not be mitigated, because speculative revenues do not materially impact capacity market offers. We disagree. We find that no materiality threshold is appropriate, as discussed *infra* IV.B. Allowing resources to enter the capacity market without mitigation and then subsequently accept a State Subsidy for the relevant delivery year would negate the purpose of the MOPR and would be unjust and unreasonable for the reasons outlined in the June 2018 Order.

### 4. General Industrial Development and Local Siting Support

#### a. PJM's Proposal

78. PJM proposes to exclude from its definition of Material Subsidy state payments relating to industrial development and local siting. With respect to industrial development, PJM proposes to exclude "payments (including payments in lieu of taxes), concessions, rebates, subsidies, or incentives designed to incent, or participation in a program, contract or other arrangement that utilizes criteria designed to incent or promote, general industrial development in an area[.]"[155] With respect to local siting, PJM proposes to exclude "payments concessions, rebates, subsidies or incentives designed to incent, or participation in a program, contract or other arrangements from a county or other local government authority using eligibility or selection criteria designed

[155] Proposed Tariff at Definitions (Material Subsidy), subsection (5).

to incent, siting facilities in that county or locality rather than another county or locality."[156]

79. PJM asserts that subsidies of this sort are appropriately excluded from mitigation because any such payments are unrelated to the production of electricity.[157] PJM argues that, instead, these subsidies are generally aimed at economic development through development of grants, tax credits, and the like. PJM adds that these subsidies have been excluded from the MOPR previously, as part of the categorical exemption for competitive entry in place prior to the *NRG* remand proceeding.[158]

**b. <u>Intervenor Positions</u>**

80. Some intervenors support excluding subsidies relating to general industrial development and/or siting incentives, arguing that payments, assurances, or other such benefits provided by taxpayers are distinguishable from a payment funded by electricity consumers.[159] Other intervenors oppose PJM's proposal. LS Power argues that any exception for a specific class of resource, or a given type of subsidy program, would be inconsistent with the Commission's recognition that all subsidy programs result in price suppression for the entire market, regardless of intent.[160]

81. Exelon asserts that PJM's MOPR should mitigate any form of out-of-market revenue, regardless of its purpose, including development incentives or siting considerations. Exelon argues that an exception for development and siting incentives is arbitrary and raises the same concern that the Commission has identified regarding transparency and the competitiveness of offers in the capacity market. Exelon points to a Pennsylvania program that eliminated state and local taxes for a coal-to-gas conversion plant through 2023, noting that this tax relief measure allowed a resource to be constructed at lower cost and submit a capacity offer at less than its true going-forward costs.[161]

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[156] *Id*. subsection (6).

[157] PJM Initial Testimony at 23-24.

[158] *Id*. at 24; *see also* 2013 MOPR Order, 143 FERC ¶ 61,090 at P 53.

[159] PJM Consumer Representatives Initial Testimony at 9; OCC Initial Testimony at 6-7.

[160] LS Power Initial Testimony at 9 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 155); *see also* NEI Initial Testimony at 5; PSEG Initial Testimony at 7.

[161] Exelon Initial Testimony at 18.

82. Finally, AES argues that Payments in Lieu of Taxes have the ability to materially impact net going forward costs of capacity resources, and should therefore be treated as subsidies subject to PJM's MOPR.[162]

### c. Commission Determination

83. We adopt PJM's proposal to exclude generic industrial development and local siting support from those types of support that will be treated as a State Subsidy for the purposes of the expanded MOPR. We find that PJM's proposed exclusions are reasonable, given that the support at issue is available to all businesses and is not "nearly 'directed at' or tethered to the new entry or continued operation of generating capacity in the federally-regulated multi-state wholesale capacity market administered by PJM."[163]

## 5. Federal Subsidies

### a. PJM's Proposal

84. PJM proposes to exempt from the MOPR resources receiving federal subsidies enacted into law prior to March 21, 2016, the refund effective date established in the Calpine complaint proceeding.[164] Specifically, PJM proposes to apply the MOPR to resources receiving federal subsidies "authorized pursuant to federal legislation or a federal subsidy program enacted *after* March 21, 2016 . . . unless such federal legislation specifically exempts the application of MOPR to the program being authorized pursuant to federal legislation."[165]

85. PJM asserts that the refund effective date is an appropriate cut-off date because the proposal in the Calpine complaint, to apply the MOPR to all resources, provided the first notice to market participants that federal subsidies could be subject to mitigation under PJM's MOPR.[166] PJM adds that, while the Commission's jurisdiction under the FPA should not be construed to countermand other acts of Congress, it is reasonable to assume, prospectively, that Congress is aware of the Commission's authority to address the impacts of federal subsidies on clearing prices in the organized markets and could

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[162] AES Initial Testimony at 20.

[163] *Supra* P 68.

[164] PJM Initial Testimony at 12, 28.

[165] *Id*. at 28.

[166] *Id*. at 28-29.

expressly limit the Commission's ability to address such effects.[167] PJM argues that this expectation is particularly reasonable given recent court decisions confirming the Commission's authority under the FPA to address the impacts of subsidies on wholesale markets.[168]

### b. Intervenor Positions

86. Several intervenors support exempting all resources receiving federal subsidies from mitigation.[169] The New Jersey Board argues that federal subsidies should be exempted, because subjecting such subsidies to the MOPR could drastically increase costs for consumers.[170] Clean Energy Advocates generally support PJM's proposal to exclude federal subsidies from the MOPR, if the federal legislation or federal subsidy program at issue was enacted prior to the refund effective date in this proceeding, but would extend the exemption to all federal subsidies adopted prior to a Commission order accepting this aspect of PJM's proposal.[171] On specific federal legislation or subsides, some intervenors oppose applying the MOPR to the Production Tax Credit (PTC), or the Investment Tax Credit (ITC), or U.S. Rural Utilities Service (RUS) financing.[172]

87. Several intervenors urge caution with regard to finding that federal efforts to ensure grid resilience and promote national security are subsidies.[173] By contrast, LS

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[167] *Id*. at 29.

[168] PJM Initial Testimony at 29-30 (citing *Star*, 904 F.3d at 522-24 (holding that the Illinois ZEC program is not preempted and noting the Commission's June 2018 Order); *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 53-56 (2d Cir. 2018) (holding that the New York ZEC program is not preempted)).

[169] *See, e.g.*, New Jersey Board Initial Testimony at 27-28; ODEC Initial Testimony at 24-25.

[170] New Jersey Board Initial Testimony at 27-28.

[171] Clean Energy Advocates Initial Testimony at 33-34 & n.82.

[172] Clean Energy Industries Initial Testimony at 3, 7-12 (arguing that the ITC and PTC are valid exercises of Congress's ability to further the general welfare through its expansive taxing and spending power, and that the Commission cannot frustrate Congress's broader policy goals to encourage renewables based on the Commission's more limited rate jurisdiction); ACORE Initial Testimony at 3; NOVEC Initial Testimony at 6; NRECA Initial Testimony at 25-26 (explaining that RUS debt is a common form of financing for electric cooperatives to access capital for electric investment).

[173] ACCCE/NMA Initial Testimony at 3-5; *see also* AEE Initial Testimony at 5

Power asserts that any federal program that would provide subsidies to coal or nuclear resources could potentially dwarf the state subsidy programs that the Commission addressed in the June 2018 Order and fatally impair the operation of PJM's capacity market.[174]

88. Finally, some intervenors oppose a MOPR exception for any federal subsidy.[175] EPSA and IPP Coalition argue that mitigating resources receiving federal subsidies is consistent with the Commission's exclusive FPA jurisdiction over wholesale rates and there is no legal grounds for distinguishing between federally subsidized resources and state subsidized resources.[176]

### c. Commission Determination

89. The replacement rate will not require mitigation of capacity offers that are supported by federal subsidies. We agree with arguments that subsidies created by federal law distort competitive outcomes in the PJM capacity market in the same manner as do State Subsidies. However, this Commission's authority to set just and reasonable rates is delegated by Congress through the FPA. That statute has the same legal force, and springs from the same origin, as any other federal statute. This Commission may not, therefore, disregard or nullify the effect of federal legislation by finding that it would be unjust, unreasonable, or unduly discriminatory to allow a PJM capacity resource to rely on a federal subsidy that provides the resource with a competitive advantage over other resources Congress has not chosen to assist in the same way.[177] Nor is it this

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(arguing that every energy technology has received some level of government policy support to help it develop and enter the markets); OCC Initial Testimony at 23 (arguing that it would be premature for FERC to address any potential future federal subsidies for grid resilience or fuel security); NRG Initial Testimony at 42-43.

[174] LS Power Initial Testimony at 12.

[175] *See, e.g.*, Brookfield Initial Testimony at 4-5; EPSA Initial Testimony at 16-19; IPP Coalition Initial Testimony at 4, 7-8; FES Initial Testimony at 7-8; LS Power Initial Testimony at 7, 11-12; NRG Initial Testimony at 10, 42-43; PSEG Initial Testimony at 7; API Initial Testimony at 3, 21; P3 Initial Testimony at 10; P3 Reply Testimony at 8; Cogentrix Reply Testimony at 10.

[176] EPSA Initial Testimony at 16-19; IPP Coalition Initial Testimony at 11.

[177] *Morton*, 417 U.S. at 550-51("Where there is no clear intention otherwise, a specific statute will not be controlled or nullified by a general one, regardless of priority enactment."); *Silver*, 373 U.S. at 357 (an appropriate analysis is one that "reconciles the operation of both statutory schemes with one another rather than holding one completely ousted"); *Tug Allie-B*, 273 F.3d at 941 (reiterating general statutory construction canons

Commission's place to require, as PJM has suggested,[178] that Congress must expressly declare that it intends any future federal subsidy to override market rules accepted by the Commission.

## B. Materiality Thresholds

### 1. PJM's Proposals

90. PJM proposes two materiality thresholds under which subsidized resources would not be subject to the MOPR. First, PJM proposes that a resource must have an unforced capacity threshold of greater than 20 MWs to be subject to the MOPR. PJM notes that the Commission has previously accepted a 20 MW materiality threshold, as applicable to the MOPR,[179] Qualifying Facilities,[180] and distinguishing interconnection procedures.[181] PJM argues that its proposed 20 MW threshold appropriately "excludes resources that are too small, individually or collectively, to meaningfully impact price outcomes from the expanded MOPR."[182] PJM adds that, given the relatively low capacity factors attributable to renewable resources, few renewable resources in the PJM region would exceed the 20 MW threshold.[183]

91. Second, PJM proposes to exclude from its definition of Material Subsidy any subsidy that is not "1% or more of the resource's actual or anticipated total revenues from PJM's energy, capacity, and ancillary services markets."[184] PJM explains that the one

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that statutes relating to the same subject matter should be construed harmoniously and, if not, the more recent or specific statute should prevail over the older and more general law).

[178] *See* PJM Initial Testimony at 29-30.

[179] PJM Initial Testimony at 15 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at P 170).

[180] *Id*. at 16.

[181] *Id*. at 17.

[182] *Id*. at 18.

[183] In other words a renewable resource would need a larger nameplate capacity to have 20 MW of unforced capacity. *Id*. at 17.

[184] *Id*. at 21.

percent materiality threshold is to exclude financial support that is unlikely to raise price suppression concerns.[185]

### 2. **Intervenor Positions**

92. Some intervenors support PJM's proposed materiality exemption for resources smaller than 20 MW of unforced capacity, arguing that small resources are unlikely to have a meaningful impact on capacity clearing prices in PJM and should not be subject to the MOPR.[186] ACORE states that it would be administratively burdensome with little benefit to apply the MOPR to resources smaller than 20 MW unforced capacity.[187] AEE argues that investments in smaller distributed energy resources are typically undertaken for reasons unrelated to capacity market participation and there is no evidence that distributed energy resources are likely to engage in uneconomic offer strategies or meaningfully suppress prices.[188] Microgrid generally supports the 20 MW threshold but asserts that microgrids that wish to participate in the RPM should be permitted to offer a combination of assets up to the 20 MW threshold without being subject to the MOPR (and subsequently to be able to select a different combination to fulfill the same commitment).[189]

93. Other intervenors support the concept of a materiality threshold, but urge the Commission to impose a higher threshold than PJM's proposal. AES proposes that, since many renewable resources are limited in the actual amount of capacity they can offer into the capacity market, increasing the threshold to 40 MW or 50 MW would create an appropriate safe harbor.[190]

94. Others intervenors oppose a 20 MW materiality threshold, arguing that the aggregate number of small resources can have large impacts on markets and that all

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[185] *Id*.

[186] Clean Energy Industries Initial Testimony at 3, 22-23; DC People's Counsel Initial Testimony at 10; ACORE Initial Testimony at 3; IMEA Reply Testimony at 12; Joint Consumer Advocates Initial Testimony at 14; Microgrid Reply Testimony at 12-13; Pennsylvania Commission Reply Testimony at 13; AEE Initial Testimony at 18.

[187] ACORE Initial Testimony at 3.

[188] AEE Initial Testimony at 18.

[189] Microgrid Reply Testimony at 12-13.

[190] AES Initial Testimony at 19; *see also* Joint Consumer Advocates Initial Testimony at 14.

resources should follow market rules, regardless of size.[191] Exelon argues that such a threshold will exempt a significant number of renewable projects, which is contrary to the June 2018 Order's directive to protect PJM capacity prices from the impact of any resource receiving out-of-market support.[192] Exelon contends that the threshold will invite gamesmanship and needless litigation as resource owners attempt to qualify for exemption under the threshold.[193] PSEG argues that the 20 MW threshold is too high, as many state policy supported resources are small and can be easily added or uprated in small increments that would avoid tripping the proposed 20 MW threshold in any given year or at any single site, while adding up to a considerable amount of capacity over time.[194]

95. On PJM's proposed revenue threshold, a number of intervenors generally support a revenue threshold, including PJM's proposed threshold of excluding from review resources receiving a subsidy that is not one percent or more of the resources' actual or anticipated total PJM revenues.[195] Other intervenors argue that PJM's proposed one percent threshold value is too small, or not sufficiently targeted. AES argues that a higher threshold of fifteen percent out-of-market revenue relative to annual total projected revenue should be adopted, asserting that subsidies resulting in less than this fifteen percent threshold do not threaten competitive bidding because the out-of-market support is far less likely to affect how the resource would be offered into the capacity market.[196] PJM Consumer Representatives propose a revenue threshold equal to or

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[191] *See, e.g.*, Exelon Initial Testimony at 20-21; Exelon Reply Testimony at 60-61; Talen Reply Testimony at 5; Market Monitor Reply Testimony at 5; LS Power Reply Testimony at 8-9. Exelon asserts that allowing 40 different 20 MW wind farms to offer as price takers would have the same impact as allowing one 800 MW nuclear unit to do so, and there is therefore no basis for allowing one and not the other. Exelon Initial Testimony at 20-21.

[192] Exelon Reply Testimony at 61.

[193] Exelon Initial Testimony at 21.

[194] PSEG Initial Testimony at 7.

[195] ACORE Initial Testimony at 3; DC People's Counsel Initial Testimony at 10; Joint Consumer Advocates Initial Testimony at 14 (also encouraging the Commission to consider whether a higher threshold is necessary); PSEG Initial Testimony at 6; Exelon Initial Testimony at 5 (arguing that any resource receiving out-of-market payments that, *taken together*, exceed one percent of the revenues the resource would expect to receive in the PJM markets should be subject to the MOPR).

[196] AES Initial Testimony at 16. AES further asserts that, using a $150 MW-day capacity value and $26 MW-day estimated energy and ancillary services revenue, as set

greater than fifteen percent of Net CONE * B,[197] i.e., treating as a Material Subsidy any such subsidy that is equal to, or exceeds, this threshold.[198]

96. Clean Energy Advocates oppose PJM's proposed one percent revenue threshold, arguing that PJM's focus on whether an incentive is large relative to the resource's revenue not only ignores whether the government action at issue affects a single resource or an entire fleet, but also ignores the absolute value of the incentive. Clean Energy Advocates note that it is illogical to assume that a subsidy slightly over one percent of a 20 MW resource's revenue could have a more significant market impact than a subsidy slightly under one percent of a 1,000 MW resource's revenue. Clean Energy Advocates argue that incentives that are not certain or not likely to be significant enough to impact a resource's bid and those that are small in an absolute sense should not be subject to the MOPR, since those incentives are unlikely to significantly change market outcomes.[199]

97. Clean Energy Advocates conclude that an expanded MOPR should only be applied to policies that have the highest absolute magnitude impact on the greatest total capacity of resources.[200] The New Jersey Board argues that PJM's one percent revenue threshold proposal should be rejected as unsupported, asserting that PJM has not shown that a resource would modify its sell offer based on a state subsidy it has received equal to 1.1 percent of that resource's actual or anticipated market revenues.[201]

### 3. <u>Commission Determination</u>

98. We decline to adopt PJM's proposed materiality thresholds. A materiality threshold implies that there is a threshold under which a State-Subsidized Resource participating in the capacity market has a *de minimis* effect on capacity prices. The June

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forth in PJM's Initial Testimony, a one percent threshold would mean that a new combustion turbine unit receiving a subsidy as small as $2/MW-day would be subject to a $355/MW-day MOPR that is more than twice as large as clearing prices in PJM's past capacity auctions. AES Reply Testimony at 6.

[197] Under the Capacity Performance construct, Net CONE * B represents the opportunity cost of taking on a capacity payment. *See PJM Interconnection, LLC*, 151 FERC ¶ 61,208 at P 338 n.283 (2015).

[198] PJM Consumer Representatives Initial Testimony at 9.

[199] Clean Energy Advocates Initial Testimony at 2.

[200] *Id*. at 32-33.

[201] New Jersey Board Initial Testimony at 16.

2018 Order found that PJM's Tariff failed to protect the capacity market from State-Subsidized Resources, regardless of the amount of out-of-market support received, because out-of-market support at any level is capable of distorting capacity market prices.[202] The Commission noted specifically the expected future increase in support for renewable resources,[203] many of which would be exempt from the expanded MOPR under PJM's proposed capacity threshold. As some intervenors point out, the aggregate impact of small resources can create unjust and unreasonable rates, not just a single resource under 20 MWs.[204] Since, on aggregate, small State-Subsidized Resources may have the ability to impact capacity prices, adopting a materiality threshold would undermine the very purpose of our action here.

99. Furthermore, if a State Subsidy is so small as to be arguably immaterial, then the resource's offer should be competitive without it. And, a resource owner may apply for a Unit-Specific Exemption to justify an offer below the default offer price floor. A resource owner may also choose to forego a State Subsidy under the Competitive Exemption in favor of unmitigated participation in the capacity market.

## C. MOPR Offer Price Floors

### 1. PJM's Proposal

100. Under PJM's proposal, the determination of the default offer price floor would depend on whether the material resource: (i) is a generation resource or a demand resource; (ii) has previously cleared in an RPM auction; or (iii) has been subject to PJM's proposed carve-out allowance since it last cleared an RPM auction.[205]

101. For resources that have not previously cleared a capacity auction, PJM proposes to retain the historical approach of setting the default offer price floor at Net CONE, i.e., at a level equal to the cost of new entry for each resource type, net of the resource type's estimated energy and ancillary services markets revenues.[206] PJM proposes to include its

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[202] June 2018 Order, 163 FERC ¶ 61,236 at P 150.

[203] *Id*. P 151.

[204] *E.g.*, Exelon Initial Testimony at 20-21; Market Monitor Reply Testimony at 5.

[205] PJM proposed Tariff, Att. DD, § 5.14(h)(iv)(A).

[206] PJM Initial Testimony at 38-39. PJM notes that these values would be based on information from a database of the National Renewable Energy Laboratory, https://atb.nrel.gov, and include overnight capital costs and the fixed operating and maintenance expense for nuclear, coal, hydro, solar photovoltaic, onshore wind, and offshore wind technologies, as projected for 2022. PJM adds that combined cycle and

default values in its Tariff, subject to annual adjustment and PJM's quadrennial review of its Variable Resource Requirement (VRR) Curve and CONE values.[207]

102. PJM proposes to calculate its default energy and ancillary services revenue estimates based on historic revenues.[208] To calculate the MOPR offer price floor for demand resources that have not previously cleared, PJM proposes to apply the historical average of all demand resource offers submitted in the last three BRAs, for the Locational Deliverability Areas (LDA) in which the demand resources are located. PJM asserts that projecting a generically applicable cost to develop new demand resources is not feasible.[209]

103. For existing resources (other than existing demand resources), PJM proposes that a resource subject to the MOPR be allowed to offer at a level no lower than its avoidable cost rate, which reflects its going-forward costs, net of estimated energy and ancillary services markets revenues (Net ACR).[210] PJM states that its default Net ACR for each resource type would be subject to revision under its quadrennial review of its VRR Curve and CONE values.[211]

104. PJM explains, however, that the default Net ACR for most existing generation resource types are low. PJM proposes to set the default Net ACR values for existing hydro, pumped hydro, solar photovoltaic, and onshore wind at $0, given its view that even the most conservative estimate of energy and ancillary services market revenues for these resources is higher than the estimated ACR. PJM proposes that, because this would result in negative default offer price floors, the prices be set at $0.[212] PJM adds that, if a seller believes the default offer price floor is too high, it can request a resource-specific

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combustion turbine levelized annual costs are based on 2021-22 BRA planning parameters, as escalated to 2022-23. *Id.*

[207] *Id*. at 39-42.

[208] *Id*. at 40.

[209] *Id*. at 42-43.

[210] A resource's avoidable costs are its incremental costs of being a capacity resource: its fixed annual operating expenses that would not be incurred if it were not a capacity resource over that period.

[211] PJM Initial Testimony at 45. PJM made its VRR Curve quadrennial filing on October 12, 2018, in Docket No. ER19-105-000.

[212] *Id*. at 46.

determination. Finally, PJM proposes to set the default offer price floor for existing demand resources at $0. PJM notes that this value is appropriate because it was not able to identify any meaningful avoidable costs that would be incurred by an existing demand resource that would justify a higher value.[213]

### 2. Intervenor Positions

#### a. Planned Resources

105. Some intervenors argue the default offer price floors for both new and existing resources should be set at Net ACR.[214] Others argue the floors should be set based on Net CONE * B. The Market Monitor argues that the default offer price floor, which it argues defines the competitive offer, should be consistent with the definition in Capacity Performance, Net CONE * B.[215] The Market Monitor notes, however, that this definition is not accurate if there are no performance assessment intervals, or when the non-performance charge rate is not based on an accurate estimate of the expected number of performance assessment intervals. In those cases, the Market Monitor argues, a competitive offer should be defined by the Net ACR.[216] Conversely, Vistra opposes the Market Monitor's proposal as administratively burdensome and potentially providing the Market Monitor significant control over all offers in the capacity market.[217]

106. Some intervenors argue that setting the default offer price floor for new resources at Net CONE disadvantages them relative to existing resources.[218] ODEC contends that basing the default offer price floors for planned resources on Net CONE is contrary to

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[213] *Id*. at 47.

[214] Clean Energy Industries Reply Testimony at 24; DC People's Counsel at 9; ELCON Reply Testimony at 6; Vistra Initial Testimony at 16. Vistra's witness suggests, as an alternative, that the default offer price floors mirror the default capacity market seller offer cap at Net CONE * B. Vistra Initial Testimony, Russo Aff. at 15.

[215] Market Monitor Initial Testimony at 15; *see also* Exelon Initial Testimony at 30.

[216] Market Monitor Initial Testimony at 15.

[217] Vistra Reply Testimony, Russo Reply Aff. at 39-40.

[218] ELCON Reply Testimony at 6; Joint Consumer Advocates Reply Testimony at 8-9.

rational recovery of investment and will discourage self-supply.[219] The Market Monitor asserts that a competitive offer for a new resource in the capacity market is not Net CONE because such an offer implies a significant chance of not clearing, does not maximize profits for a developer, and constitutes a noncompetitive barrier to entry that would create a noncompetitive bias towards existing resources.[220] The Market Monitor takes issue with suggestions that Net CONE must be used in order to ensure that resources with out-of-market revenues do not clear in their first year in the capacity market, arguing it is not appropriate to define a competitive offer so as to exclude some offers.[221] OPSI argues PJM's use of Net CONE as a measure for a competitive market price in PJM is not a valid yardstick to measure market adjustments under application of a MOPR without exemptions, because Net CONE has been consistently too high. OPSI encourages the Commission to consider a recent report finding that Net CONE values for the 2022/2023 delivery year are between 22 and 41 percent lower than the current Net CONE values.[222]

107. AES opposes PJM's proposed default offer price floors arguing that those for new entrants far exceed the typical clearing prices of PJM capacity auctions.[223] Illinois Commission argues that PJM's proposed default offer price floors should be capped at the vertical intercept point on the VRR curve to ensure the default values are not so high as to make it impossible for mitigated resources to clear, regardless of the clearing price.[224]

108. PSEG argues, for new units, the default offer price floors should be based on the gross CONE applicable to the class of generational technology to which those units belong.[225]

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[219] ODEC Initial Testimony at 12.

[220] Market Monitor Reply Testimony at 4.

[221] *Id*. at 5.

[222] OPSI Initial Testimony at 10-12 (citing the Brattle Group and Sargent & Lundry, *PJM Cost of New Entry*, (Apr. 19, 2018), https://www.pjm.com/~/media/committeesgroups/committees/mic/20180425-special/20180425-pjm-2018-cost-of-new-entry-study.ashx).

[223] AES Initial Testimony at 12-13; AES Reply Testimony at 4-6.

[224] Illinois Commission Reply Testimony at 23.

[225] PSEG Initial Testimony at 12.

109. Some intervenors argue that the Commission should establish a test that permits a subsidized planned resource subject to the MOPR to make offers into future PJM capacity markets as an existing resource after five years of commercial operation, to prevent the MOPR from becoming a permanent barrier to entry.[226] Further, AES states that projects planned before new capacity market rules are imposed and that have contracts in place should be treated as existing resources; that is, be "grandfathered" as a transition device, particularly under an expanded MOPR.[227]

110. Some intervenors argue that PJM's proposed Net CONE values are thinly supported and contain errors.[228] For example, these intervenors contend that the *NREL Annual Technology Baseline* provides multiple sets of cost estimates for location-specific projects, and that PJM does not explain which numbers it actually uses, and that PJM offers identical values for energy and ancillary services revenue for onshore wind and offshore wind, which is not plausible given the different energy production profiles and locations of these technology types.[229]

111. AEE argues that, for planned renewable resources, the default offer price floors should reflect the declining costs and unique cost structures of advanced energy technologies to prevent over-mitigation.[230] Clean Energy Industries state that any default offer price floor applied to renewable resources receiving RECs should account only for the price-suppressive effect of the REC and should not be any higher.[231]

112. Clean Energy Industries state that PJM's use of the resource's lowest estimated energy revenues is unreasonable, because the default value should not be based on the extreme end of the zone of reasonableness.[232] Clean Energy Industries also note that this methodology is an unjustified departure from that used to calculate Net CONE as an

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[226] AES Initial Testimony at 22; PSEG Initial Testimony at 13.

[227] AES Initial Testimony at 22-23.

[228] Clean Energy Advocates Reply Testimony at 14-15; USC Reply Testimony at 3.

[229] Clean Energy Advocates Reply Testimony at 14-15; USC Reply Testimony at 9; Clean Energy Industries Reply Testimony at 22.

[230] AEE Initial Testimony at 27.

[231] Clean Energy Industries Initial Testimony at 18.

[232] Clean Energy Industries Reply Testimony at 18.

auction parameter, which uses annual average revenues.[233] Clean Energy Industries argue that PJM should either use the RTO-wide average energy revenues or develop default levels specific to each zone. Clean Energy Industries further object to PJM's values, arguing that PJM does not appear to have included ancillary service revenues in the default offer price floor calculations for renewable resources.[234] Third, Clean Energy Industries argue that PJM's proposed standard inputs, including the carrying charge and useful life for combined cycle and combustion turbines, are excessive for renewable resources, and that PJM should instead use values more appropriate to solar and wind resources.[235]

113. Some intervenors support setting the default offer price floor for demand response at zero.[236] Joint Consumer Advocates argue that PJM's proposal to average the last three years' demand response offers would be anti-competitive, unjust, unreasonable, and unduly discriminatory against new demand response resources. Joint Consumer Advocates explain that the default offer price floor would be excessively high because it would count new demand response bids, which are subject to the price floor, toward determining the price floor, creating an inflationary feedback loop.[237]

### b. Existing Resources

114. Some intervenors agree with PJM that default offer price floors for existing resources should be based on going-forward avoidable costs, which will ensure the MOPR appropriately mitigates only uneconomic units with significant going-forward costs.[238] AES states that, should the Commission elect to use default offer price floors based on ACR, then it should also require a clear and transparent process to define and

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[233] *Id*. at 19.

[234] *Id*. at 20.

[235] *Id*. at 20-21. Specifically, Clean Energy Industries argue that solar resources may have access to more desirable financial structures than gas resources, and typically have a useful life of around 40 years (30 for wind). *Id*.

[236] AEE Initial Testimony at 28.

[237] Joint Consumer Advocates Reply Testimony at 11.

[238] AEE Initial Testimony at 28-29; Brookfield Reply Testimony at 4; *see also* Buyers Group Initial Testimony at 10-11; Brookfield Initial Testimony at 2, 7; SMECO Initial Testimony at 6; PSEG Initial Testimony at 12; Clean Energy Industries Reply Testimony at 24; Vistra Initial Testimony at 16; West Virginia Commission Reply Testimony at 2.

approve the ACR used to determine the default offer price floors, including an appeal mechanism and periodic review of the ACR.[239]

115. Other intervenors argue that the default offer price floors for existing resources should instead be based on Net CONE * B, for the same reasons described above for planned resources.[240] Vistra opposes the Market Monitor's proposal as administratively burdensome and potentially providing the Market Monitor significant control over all offers in the capacity market.[241]

116. Some intervenors also object to PJM's methodology for calculating default Net ACR values. The Market Monitor argues that the ACR values developed by PJM are based "on outdated information escalated using a generic inflation factor, without accounting for technology specific trends."[242] The Market Monitor notes that PJM's values are based on 2011 data escalated using a generic inflation factor to 2022. The Market Monitor contends this is unreasonable because technology costs are generally decreasing and not increasing. Further, the Market Monitor states that the Commission could require an annual process to update gross ACR values.[243] Joint Consumer Advocates agree that PJM's ACR values are based on outdated information and argue that the inflation factor applied by PJM is excessive.[244]

117. Brookfield supports PJM's proposal to set the default offer price floors for existing hydro, pumped hydro, solar PV and onshore wind resources at $0/ICAP MW-day.[245]

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[239] AES Initial Testimony at 21.

[240] Exelon Initial Testimony at 30; Market Monitor Initial Testimony at 15-16.

[241] Vistra Reply Testimony, Russo Reply Aff. at 39-40.

[242] Market Monitor Reply Testimony at 6.

[243] *Id*.

[244] Joint Consumer Advocates Reply Testimony at 9.

[245] Brookfield Reply Testimony at 4.

118. Some intervenors agree that Net ACR for existing demand response resources is $0.[246] Microgrid states that microgrids often present to PJM as asset-backed economic demand resources and should also be subject to a MOPR offer price floor of $0.[247]

119. Direct Energy states that PJM has proposed to use default values for transmission connected (i.e., "front-of-the-meter") diesel generation for all behind-the-meter generation. However, Direct Energy argues that behind-the-meter generation is not economically similarly situated to front-of-meter generation, and thus it is not proper to use front-of-the meter ACR values for behind-the-meter generation.[248] Direct Energy states that if PJM's proposal is accepted, the Commission should ensure that the ACR used for behind-the-meter demand response reflects the true avoidable costs of such resources.[249]

### c. <u>Both Planned and Existing</u>

120. Several intervenors argue that new and existing offer floors should be set based on the same methodology. Some intervenors argue the default offer price floors for both new and existing resources should be set at Net ACR.[250] Others argue the default offer price floors should be set based on Net CONE * B. The Market Monitor contends that the default offer price floors should not be set differently for new and existing resources, because a competitive offer in the capacity market is Net ACR regardless of whether the resource is new or existing. The Market Monitor further argues that PJM's proposal to define a competitive offer for resources subject to the MOPR as the Net ACR, while leaving the definition under Capacity Performance Net CONE * B, is not reasonable.[251] The Market Monitor contends that PJM should not use two different definitions of a

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[246] DC Commission Initial Testimony at 5-6; Joint Consumer Advocates Reply Testimony at 11; AEE Initial Testimony at 21-22; Pennsylvania Commission Reply Testimony at 15-16.

[247] Microgrid Reply Testimony at 12.

[248] Direct Energy Initial Testimony at 12.

[249] *Id*.

[250] *See, e.g.*, Clean Energy Industries Reply Testimony at 24; DC People's Counsel at 9; ELCON Reply Testimony at 6; Vistra Initial Testimony at 16. Vistra's witness suggests, as an alternative, that the default offer price floor mirror the capacity market seller offer cap at Net CONE * B. Vistra Initial Testimony, Russo Aff. at 15.

[251] Market Monitor Initial Testimony at 15.

competitive offer in the same market.[252] Conversely, PSEG argues that the MOPR needs to distinguish between new and existing units.[253]

121. The Illinois Commission argues that because PJM's formula for calculating default offer price floors does not include permissible out-of-PJM-market revenues, such as proceeds from arm's-length bilateral contracts, it will result in default offer price floors that are too high that could improperly prevent a targeted resource from clearing in PJM's auctions.[254] Illinois Commission recommends that the Commission also subtract payments, assurances, or other such benefits provided by taxpayers, rather than by electricity consumers, from the resource's ACR or Net CONE, as such payments are not subsidies.[255] The Illinois Attorney General argues that the Net ACR calculation for subsidized resources should include all revenue, including that received from subsidies, to determine the accurate avoidable costs.[256]

122. The Illinois Attorney General argues that the energy and ancillary services revenue offsets should be location-specific, rather than, as PJM proposes, the lowest zonal value estimated for each resource class over the past three years.[257]

123. The Pennsylvania Commission requests that any estimated increases in energy and ancillary services revenues that result from price formation reforms should be reflected in the default offer price floors, including any historical energy and ancillary services offsets under the quadrennial review process.[258]

124. The Illinois Attorney General asserts that the Commission should direct PJM to develop default offer price floors based on objective, public information, as it does for

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[252] *Id*. at 16; *see also* Clean Energy Industries Reply Testimony at 24.

[253] PSEG Initial Testimony at 13.

[254] Illinois Commission Reply Testimony at 20-23.

[255] *Id*. at 22.

[256] Illinois Attorney General Initial Testimony at 12.

[257] *Id*. at 9; *see also* PJM Consumer Representatives Reply Testimony at 12 (arguing that the Illinois Attorney General proposal appears to be consistent with the objectives of the MOPR).

[258] Pennsylvania Commission Reply Testimony at 16-17; *see also* Illinois Commission Initial Testimony at 11.

natural gas plants under the existing Tariff.[259] UCS argues that the new default offer price floors should be subject to the same transparency as the current default offer price floors, including a description of key drivers such as technology choice, plant configurations, interconnection costs, engineering, financing, taxes, insurance, and locational information. UCS argues that PJM has provided so little information that it is not possible to tell which values PJM used in even the publicly cited source material.[260] Clean Energy Industries state that accurate resource type-specific wind and solar default offer price floors need to account for bonus depreciation and federal incentives like the PTC and ITC, as well as a longer, resource-specific useful life than PJM's proposed 20 year asset life.[261]

### d. Resource Type-Specific Values

125. Some intervenors support resource type-specific values.[262] Conversely, IMEA generally supports PJM's proposed default offer price floors, but disagrees that default offer price floors should be different as between technology types.[263] IMEA asserts that the establishment of a different default offer price floor for the technology types other than natural gas-fired combustion turbines would require sell offers in excess of the top of the VRR curve (which is determined based on a single CONE value), thereby necessarily precluding new resources of other technology types from ever clearing the auction. IMEA concludes that the default offer price floor for all technology types should be set based on the lowest cost technology type and therefore represent the most competitive resource type for new entry. IMEA argues that market participants who choose to build more expensive technologies will not recover all of their costs from the capacity market, but will also not adversely affect the clearing price, because the default offer price floor will already be at the top of the VRR curve.[264]

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[259] Illinois Attorney General Initial Testimony at 11.

[260] UCS Reply Testimony at 8-9.

[261] Clean Energy Industries Initial Testimony at 19-20. Clean Energy Industries proposes a 35 year asset life. *Id.*

[262] DC People's Counsel Initial Testimony at 9; LS Power Initial Testimony at 7; NRG Initial Testimony at 42; PSEG Initial Testimony at 12; Brookfield Reply Testimony at 4.

[263] IMEA Reply Testimony at 17.

[264] *Id*. at 17-18.

**e. Alternate Methodologies**

126. AES proposes a Proportional MOPR which accounts for the value of the subsidy relative to a resource's revenue, noting that for a partial subsidy, there could still be headroom between the Proportional MOPR offer price floor and the clearing price in a capacity auction.[265]

127. PJM Consumer Representatives assert that the default offer price floor should approximate an offer that would have been submitted absent the subsidy, and thus should equal the average offers from "like resources" that cleared the BRA over the past three years, excluding offers subject to the MOPR (e.g., the MOPR for an onshore wind resource receiving a subsidy would be the average cleared offer for onshore wind projects over the past three BRAs).[266] However, where the number of "like resources" that cleared in the BRA over the past three years is less than ten units total, PJM Consumer Representatives state the alternate proxy would be the lower of: (a) 50 percent of Net CONE * B, or (b) the average of the subsidized resource's actual cleared offers in the three BRAs that were conducted before it began receiving a subsidy.[267] Vistra opposes this proposal as administratively burdensome, and further notes that offers submitted prior to a resource receiving a subsidy may still be uncompetitive if the resource owner already knew it would be receiving the subsidy at the time of submission.[268]

128. Clean Energy Industries propose a Depreciated MOPR Approach, which would calculate a default offer price floor by subtracting the first-year annual energy and ancillary services revenues from the first-year annual operating costs and remaining levelized plant costs.[269] Clean Energy Industries state that the only difference between the Depreciated MOPR Method and PJM's proposal is when the default offer price floor is calculated; under PJM's proposal, default offer price floors are calculated at the first

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[265] AES Reply Testimony at 5.

[266] PJM Consumer Representatives Initial Testimony at 12. PJM Consumer Representatives explain that categories defined broadly based on generation technologies (e.g., coal, natural gas-fired combustion turbines, natural gas-fired combined cycle, oil-fired, onshore wind, offshore wind, solar) would suffice. AFPA states that, while it does not necessarily endorse all of the details of the PJM Consumer Representatives' proposals, it believes the proposals to be a practical way to address the Commission's concerns. AFPA Initial Testimony at 2.

[267] PJM Consumer Representatives Initial Testimony at 12-13.

[268] Vistra Reply Testimony, Russo Reply Aff. at 42.

[269] Clean Energy Industries Reply Testimony at 25.

year of operation, while under the Depreciated MOPR Method, default offer price floors are calculated at the year in which the resource bids into the capacity market.[270] Clean Energy Industries argue that this proposal is superior to PJM's, because it would reflect a more accurate default offer price floor for resources that fail to clear the capacity market initially.[271]

129. Alternatively, Clean Energy Industries contend that PJM could use the Levelized Cost of Energy to calculate the default offer price floor, because Levelized Cost of Energy is a commonly accepted method for calculating a generator's total revenue requirement based on its energy output over its useful life.[272] Clean Energy Industries argue this would more appropriately account for the variable energy output during an asset's operating life than the Net CONE approach.[273]

**f. <u>Answers</u>**

130. PJM responds to intervenor arguments that any of the default offer price floors are too high, arguing that the values are only defaults and no seller is required to use them. On the contrary, PJM points out that any seller can use the resource-specific review process to demonstrate lower costs.[274] Clean Energy Industries, in its Answer, respond that the unit-specific review is an insufficient protection against an unjust and unreasonable market structure, especially given that some financial modelling assumptions appear to be enumerated in PJM's proposed Tariff language and thus cannot be changed.[275] Clean Energy Industries further argue that the need to pursue unit-specific review is an added burden that may deter new entry.[276]

131. PJM agrees, however, with Clean Energy Industries' argument that the default offer price floors should include an offset for ancillary services market revenues. PJM notes that such revenues are small and unlikely to have a significant impact on the default

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[270] *Id*. at 25-26.

[271] *Id*. Clean Energy Industries also supports the Market Monitor's ACR approach as an alternative. *Id.* at 23.

[272] *Id*. at 28.

[273] *Id*. at 29.

[274] PJM Answer at 2-3.

[275] Clean Energy Industries Answer at 5.

[276] *Id*. at 6.

offer price floors, but states that PJM is willing to update its proposed floors in a compliance filing.[277]

132. PJM asserts, on reply, that using the lowest applicable zonal energy revenue estimate to offset estimated costs is reasonable, because there is significant variation in energy revenues for each resource type between zones and over time. PJM argues the lowest value is appropriate because the purpose of the MOPR is to establish a conservative default option. PJM notes again that sellers can always use the resource-specific option and use energy market revenues for the zone in which the resource is located, if the seller objects to the default energy revenue estimate.[278]

133. PJM disagrees with Clean Energy Industries' arguments that it is inappropriate to use a standardized set of financial inputs developed for natural gas-fired resources for renewable resources. PJM argues that it is just and reasonable to use the same Commission-approved parameters for all resources participating in its capacity market to ensure all resources competing against each other are being analyzed in a comparable fashion.[279] PJM further argues that 20 years is a reasonable asset life assumption, as "recent experience" with the rapid technological changes in the relative competitiveness of various resource types make any longer estimate overly optimistic for use in a default offer price floor.[280] Alternatively, Clean Energy Industries argue that PJM does not quantify this recent experience.[281]

134. PJM also disagrees with Clean Energy Industries that the competitive costs for renewable resources should be based on a subsidy in the form of tax credits, arguing that this would be contrary to the purpose of the MOPR.[282]

135. PJM responds to arguments that the energy market revenue estimates for onshore and offshore wind are in error, explaining that it calculated the two values using different assumptions, but that the values happened to coincide.[283] UCS, in its Answer, argues that PJM's explanation does not resolve their concerns and that their arithmetic still contains

[277] PJM Answer at 4 (citing Clean Energy Industries Reply Testimony at 20).

[278] *Id*. at 5 (citing Clean Energy Industries Reply Testimony at 18).

[279] *Id*. at 6-7 (citing Clean Energy Industries Reply Testimony at 20-22).

[280] *Id*. at 7.

[281] Clean Energy Industries Answer at 5 n 18.

[282] PJM Answer at 7.

[283] *Id*. at 7-8.

an error. Specifically, UCS argues that, in calculating the estimated annual energy revenue for onshore wind, PJM erroneously applied the capacity factor twice.[284] In addition, UCS argues that PJM states that it used data from the National Renewable Energy Laboratory for the capacity factors for onshore and offshore wind, but UCS contends that the *NREL Annual Technology Baseline* contains numerous potential capacity factors for offshore wind, all of which are higher than PJM's proposed value of 26 percent.[285]

136. With regard to new resources, PJM argues that the Commission has consistently approached basing competitive offers for such resources on Net CONE, and that any suggested departure from that method is out of the scope of this proceeding and unreasonable.[286] PJM argues this method continues to be reasonable, because all of a resource's costs are deemed to be avoidable until the resource clears the market, and that the record in this proceeding does not justify abandoning the long-standing approach.[287] Clean Energy Industries disagree with PJM in its Answer, arguing that this methodology must be reevaluated in this proceeding, especially given that the Commission has proposed using the MOPR in a significantly different manner, and for a different purpose, than it historically has been used.[288] Clean Energy Industries argue that the Commission should explain in its ultimate order why PJM's current method for calculating the default offer price floor should be used moving forward under the new paradigm.[289]

137. PJM argues that, under the Market Monitor's proposal, subsidized new entry could circumvent the MOPR rules by accepting subsidies supporting a resource's construction costs before offering the resource into the market at a level below the resource's actual cost of entry.[290] PJM further disagrees with the proposed Levelized Cost of Entry approach, explaining that while Levelized Cost of Entry is useful for comparing energy production by different technologies, for the same basic capital and operating costs it cannot produce a significantly lower Net CONE as the basis for a resource's competitive

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[284] UCS Answer at 3 n.3.

[285] *Id*. at 3.

[286] PJM Answer at 8-9.

[287] *Id*. at 10-11.

[288] Clean Energy Industries Answer at 3-4.

[289] *Id*. at 4.

[290] PJM Answer at 11.

cost of committing as capacity.[291] Clean Energy Industries argue that PJM's Answer suggests either that PJM is not familiar with the Levelized Cost of Entry approach or is using different data than Clean Energy Industries.[292] Clean Energy Industries contend that the Commission must give full consideration to the alternative financial inputs it put forth and not dismiss them based on PJM's conclusory responses.[293]

### 3. Commission Determination

#### a. Planned Resources

138. We adopt PJM's proposal to set the default offer price floor for certain resources that have not previously cleared the capacity market at Net CONE for each resource type.[294] This is consistent with the existing MOPR, which sets the default offer price floor based on a percentage of a default Net CONE for the resource type. Given that we will retain the Unit-Specific Exemption in the replacement rate, we disagree with intervenors who argue that setting the default offer price floor at Net CONE for each resource type constitutes a barrier to entry because it is too high. On the contrary, we find that it is just and reasonable to raise that percentage from 90 to 100 percent of Net CONE. A purpose of the MOPR is to ensure resources are offering competitively. For resources that have not previously cleared a capacity auction, the MOPR is intended to ensure that uneconomic resources, that are unlikely to recover the full cost of new entry over the life of the resource, are not able to enter the market at a lower cost because they receive a State Subsidy. If a resource does not qualify for the Competitive Exemption, we find that requiring new resources to offer at 100 percent of the default Net CONE, unless they are able to justify a lower Net CONE value through the Unit-Specific Exemption, is a just and reasonable method of accomplishing this goal. We reject arguments that Net CONE is no longer appropriate now that the focus of MOPR application has shifted.[295] An underlying purpose of the MOPR has been to prevent suppliers from offering uneconomically low-priced capacity into the market—here we expand the MOPR to certain existing and new resources to address price suppression caused by State Subsidies. We further reject as unsupported arguments that the default offer price floors should instead be based on gross CONE. Net CONE more accurately

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[291] *Id*. at 12-13.

[292] Clean Energy Industries Answer at 4.

[293] *Id*. at 5 n.19.

[294] Repowered resources are considered new for the purposes of the MOPR.

[295] June 2018 Order, 163 FERC ¶ 61,236 at P 153.

reflects the costs a new resource faces in entering the capacity market because it subtracts expected revenues from costs.

139. We agree that using Net CONE for the default offer price floor for new resources may significantly affect the ability of new resources receiving State Subsidies to clear the market, as compared to using Net ACR, but we find that this is just and reasonable. New resources should be less likely to clear than many existing resources because they face additional avoidable costs that existing resources do not face, including construction and permitting costs.[296] Sellers that believe their actual costs are less than the default Net CONE values may apply for the Unit-Specific Exemption. Therefore we find that using Net CONE will not create an unjust and unreasonable barrier to entry, but will rather allow the MOPR to fulfill its purpose and protect the capacity market from uneconomic new entry by State-Subsidized Resources.

140. We also find it would not be appropriate to use Net ACR as the default offer price floor for new resources. Net ACR does not account for the cost of constructing a new resource. Using Net ACR as the MOPR value for new resources would not serve the purpose of the MOPR, because it does not reflect new resources' actual costs of entering the market and therefore would not prevent uneconomic State-Subsidized Resources from entering the market.

141. Protestors argue that subsidized resources should not be forced to remain as new resources, mitigated at Net CONE, indefinitely. We reject that argument. In order to be treated as existing resources, new State-Subsidized Resources must first clear the capacity auction subject to the default offer price floor appropriate to a new resource. It would not be reasonable to treat resources that fail to clear the capacity market subject to the new resource default offer price floor as existing resources. An exemption that allows new, State-Subsidized Resources to bypass the MOPR, solely because the MOPR prevents them from clearing, would completely defeat the purpose of the MOPR. We similarly reject arguments that projects planned before new rules are imposed should be exempt. Market participants are frequently confronted with changing rules and regulatory structures. Here, resources have been on notice since 2016, when the Calpine Complainants filed their complaint, that capacity market rules may be revised.

142. We acknowledge concerns that PJM estimates the default offer price floor for some resources in excess of the top of the demand curve. However, a high Net CONE value simply underscores how uneconomic these resources generally are in the PJM capacity market. We also note that resources for which the default offer price floor is above the demand curve starting point may request a Unit-Specific Exemption, should

[296] *See, e.g.*, PJM Initial Testimony at 44 (explaining that construction and development costs should not be included in the default offer price floor for existing resources).

they determine that their costs are lower than the default. We therefore find that it is appropriate to use a resource-type-specific default offer price floor that reasonably reflects a competitive offer for such a resource, regardless of whether it is above the demand curve starting price.

143. We also adopt PJM's proposal to update the values annually and as part of PJM's quadrennial review of its demand curve and CONE values. We reiterate that we direct PJM to use resource-type specific Net CONE values for resources that have not previously cleared a capacity auction. However, given the importance of an accurate default offer price floor and the number of questions raised in the record as to how the values were calculated, we direct PJM to provide additional explanation on how it calculated each of the proposed values on compliance, including workbooks and formulas, as appropriate.

144. We direct PJM to establish appropriate default offer price floor values for demand-side resources, including demand response and energy efficiency. As noted above, we disagree that it is infeasible for PJM to determine Net CONE or Net ACR values for demand-side resources that rely on various types of behind-the-meter generation as a substitute for purchasing wholesale power. The fundamental elements of the analysis for behind-the-meter generation is the same as for other resources. We direct PJM to provide Net CONE values for such generation on compliance, noting that it may be appropriate to use resource-type specific values as for other types of generation resources.[297]

145. For demand-side resources that commit to cease using wholesale power, rather than shift to behind-the-meter generation, PJM will average the last three years' demand response offers to determine the default offer price floor value for resources that have not previously cleared a capacity auction.[298] We find that PJM's proposed default offer price floor approach for these demand-side resources that have not previously cleared a capacity auction is just and reasonable. We note, however, that this average should include non-generation-backed demand resources. We disagree with intervenors arguing that the average will trend upward over time because PJM proposes to average all demand response offers, new and existing. While it is true that new demand response resources that receive a State Subsidy will be subject to a default offer price floor that is, in part, determined by the offers of previous new resources subjected to the same floor, the average will also include existing resources and new resources that receive the Unit-

[297] We understand that applying the MOPR to demand response resources in this manner may necessitate changes to how demand response resources participate in the capacity market, such as requiring demand response aggregators to contract with resources sooner. PJM should include in its compliance filing any additional changes to its Tariff that may be necessary in order to implement this MOPR directive.

[298] PJM Initial Testimony at 42-43.

Specific Exemption to offer below the default offer price floor. We therefore find that PJM's proposal will reasonably reflect the average costs of demand response resources and will serve as an appropriate default offer price floor.

146. We direct PJM to propose default offer floor prices for all other types of resources that participate in the capacity market, including capacity storage resources, as well as resources whose primary function is not energy production, including facilities fueled entirely by, for example, landfill gas, wood waste, municipal solid waste, black liquor, coal mine gas, or distillate fuel oil, on compliance. PJM should file additional default offer price floors for new technologies as they emerge.

147. Finally, because energy efficiency operates differently from other resources that are intended to reflect reductions in wholesale demand, it is difficult to describe energy efficiency in terms of Net CONE or Net ACR. Instead, on compliance, we direct PJM to establish objective measurement and verification requirements for new energy efficiency offers and to limit such offers to the verifiable level of savings.

### b. Existing Resources

148. We adopt PJM's proposal to set the default offer price floor for existing resources at the resource-type specific Net ACR. Net ACR for an existing resource estimates how much revenue the resource requires (in excess of its energy and ancillary service revenue) to provide capacity in the given year. Using a resource-type Net ACR as the default offer price floor for existing resources is therefore just and reasonable because it recognizes that generation resources are a long-term investment that may fluctuate in value over time, but still allows those resources to receive capacity revenues in years in which they are less profitable. We further find that the default offer price floor for existing generation-backed demand response resources should be set at Net ACR for the appropriate generation type.

149. We agree with the Market Monitor that basing the default offer price floor values for existing resources on 2011 data with a generic inflation factor is insufficient. We direct PJM to propose new values using more updated data, and to develop a process to ensure all the data used in the calculation is updated annually. As with the Net CONE values, a number of questions have been raised in the record as to how the Net ACR values were calculated. We order PJM to provide additional explanation on compliance, including workbooks and formulas, as appropriate. Additionally, we find that any uprates (i.e., incremental increases in the capability of existing resources), of any size are considered new for purposes of applying the MOPR and should be mitigated to Net CONE and not Net ACR. These uprates may come with additional avoidable costs, such as construction costs, that existing resources otherwise do not face. We also direct PJM to provide additional justification for setting the default offer price floors for existing renewable resources at zero.

150. Finally, we direct PJM to propose default offer price floors for all other types of resources, including energy efficiency,[299] non-generation-backed demand response resources, and capacity storage, as well as resources whose primary function is not energy production, including facilities fueled entirely by, for example, landfill gas, wood waste, municipal solid waste, black liquor, coal mine gas, or distillate fuel oil, on compliance.

### c. **Both Planned and Existing**

151. We find that it is just and reasonable to use different methodologies to set the default offer price floors for new and existing resources. Existing resources face different costs than new resources, because the decision to enter the market is different than the decision to remain in the market. For planned resources, the default offer price floor should include, for example, construction costs and certain fixed costs that an existing resource does not usually face.

152. Some parties argue that the Commission should set the default offer price floor for resources subject to the MOPR at Net CONE * B. The Commission previously found Net CONE * B provided a reasonable estimate of a competitive offer for a resource with a low ACR.[300] However, we did not find the Net CONE * B price accurately reflects any particular resource's cost. In addition, we note that the Commission did not find that Net CONE * B was the only just and reasonable competitive offer. We therefore find that it is just and reasonable for PJM's Tariff to use one definition of a competitive offer to set the default capacity market seller offer cap for supplier-side market power mitigation and a different one for the different purpose of setting the default offer price floor.

153. We disagree with arguments that State Subsidies should be considered as revenue for either resources that have never cleared a capacity auction or existing resources, as this would defeat the purpose of the rate modifications directed in this order, which is to prevent State-Subsidized Resources from submitting uncompetitive offers as a result of State Subsidies. We agree with PJM that the proposed 20-year asset life is appropriate.[301] We also agree with PJM that default MOPR values should maintain the same basic financial assumptions, such as the 20-year asset life, across resource types. The Commission has previously determined that standardized inputs are a simplifying tool

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[299] *See supra* P 148.

[300] *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208 at P 340.

[301] Rapid changes in market conditions and generation technology could make resources uneconomic in less than Clean Energy Industries' proposed 35 years.

appropriate for determining default offer price floors,[302] and we reaffirm that it is reasonable to maintain these basic financial assumptions for default offer price floors in the capacity market to ensure resource offers are evaluated on a comparable basis. Therefore, we find 20 years to be an appropriately conservative estimate.

154. We agree with intervenors and PJM that the default offer price floors should include an offset for ancillary services market revenues. In addition, we agree with intervenors that energy revenue offsets should be zone-specific, rather than based on the lowest zonal value estimated for each resource type over the past three years. Using the lowest possible value biases the default offer price floor upwards and does not reflect the revenues resources are actually likely to earn. PJM's Answer, stating that there is significant variation in energy revenues for each resource type between zones and over time, merely reinforces the importance of using zone-specific energy and ancillary services revenue values. On compliance, we order PJM to develop default average energy and ancillary services revenue offset values for each resource type by zone.

155. We agree with PJM that the default offer price floors should be updated regularly and adopt PJM's proposed Tariff language to update them annually and conduct a larger review on a quadrennial basis. We also agree with Illinois AG, however, that the calculation of the default offer price floors should be more transparent than what has been provided in the testimony. As noted above, we are requiring PJM to provide additional information supporting its values on compliance. We decline to add future transparency requirements to the Tariff at this time, as we anticipate the quadrennial filings, which historically have updated CONE and default offer price floor values, will continue to provide that information despite the broader range of default offer price floors which must be provided, and will contain significant details, consistent with the level of detail already provided in the quadrennial updates. Additional requirements are therefore unnecessary.

156. With regard to Pennsylvania Commission's requests that PJM adjust the default offer price floors to account for future changes in price formation and the results of the quadrennial review process, we find those requests to be premature. Because such changes have not yet been made, we cannot evaluate their reasonableness and decline to speculate here.

#### d. <u>Miscellaneous</u>

157. In response to arguments that the default offer price floor should be the same for all resource types, we agree with PJM that it is appropriate to calculate different default values for different resource types. The going-forward cost of a nuclear resource, for example, would likely be substantially different from that of an onshore wind resource.

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[302] 2013 MOPR Order, 143 FERC ¶ 61,090 at P 144.

Resources of different types compete against each other in a single capacity market, and it would undermine the effectiveness of the expanded MOPR to subject resources with varying going-forward costs to the same default offer price floor.

158. Finally, having established a just and reasonable method for establishing default offer price floors, we need not discuss the other alternative methodologies proposed.

### D. Exemptions

#### 1. Competitive Exemption

##### a. PJM's Proposal

159. In its paper hearing testimony, PJM does not re-propose the competitive entry exemption it proposed, and the Commission accepted, in 2013,[303] but rather submits that the expanded MOPR will apply to capacity resources receiving material subsidies where the relevant resource is "entitled" to a material subsidy and the seller "has not certified that it will forego receiving any Material Subsidy for such Capacity Resource during the applicable Delivery Year."[304] PJM states that sellers will need to affirmatively inform PJM of their choice to forego the subsidy no less than thirty days before the commencement of the relevant BRA,[305] and sellers have an ongoing obligation to provide notification of status changes.[306]

##### b. Intervenor Positions

160. Several intervenors support PJM's proposal that the expanded MOPR will not apply to resources who have certified that they will not receive a subsidy. AES agrees that resources that do not accept a subsidy or renounce an available subsidy should be exempt from the MOPR.[307] Vistra asserts that all resources participating in the capacity market without being subject to the MOPR should attest that they will not accept any subsidies prior to or during the applicable delivery year to avoid resources gaming the entitled to language by not taking a subsidy at the time of the auction, but later accepting

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[303] *See* 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 24, 28, 53 (competitive entry exemption applies to resources receiving no out-of-market funding or resources receiving out-of-market funds as a result of a competitive auction process open to all resources).

[304] PJM Initial Testimony at 25-28; proposed Tariff, Att. D, § 5.14(h)(ii)(B).

[305] PJM Initial Testimony at 27; proposed Tariff, Att. D, § 5.14(h)(iii)(A).

[306] Proposed Tariff, Att. D, § 5.14(h)(iii)(B).

[307] AES Initial Testimony at 19.

out-of-market support during the delivery year.[308] NRG argues that sellers should have an affirmative obligation to provide updated information to PJM and the Market Monitor to report the existence of a subsidy after the self-certification deadline.[309] AES states that penalties should be designed to reduce any incentive to establish new subsidies that are timed to avoid being taken into account for the upcoming auction.[310]

### c. Commission Determination

161. The focus of the expanded MOPR directed in this order is to mitigate the impact of State Subsidies on the capacity market, and, therefore, resources that do not receive State Subsidies should be able to participate in the capacity market without mitigation, subject to PJM's existing buyer-side market power rules. We therefore direct PJM to include a Competitive Exemption for both new and existing resources, other than new gas-fired resources, that certify to PJM that they will forego any State Subsidies. We find that it is reasonable and consistent with the purposes of the expanded MOPR directed herein to allow new and existing resources (other than new gas-fired resources) that certify to PJM that they will forego any State Subsidies, to avoid being subject to the applicable default offer price floor. Doing so will facilitate the capacity market's selection of the most economic resources available to meet resource adequacy objectives.

162. We share intervenors' concerns that PJM's proposed language leaves a loophole whereby a resource may not be eligible for a State Subsidy at the time of the capacity market qualification process, but may become eligible for such a subsidy, and accept it, before or during the relevant delivery year. We therefore direct PJM to include in its compliance filing a provision stating that if an existing resource[311] claims the Competitive Exemption in a capacity auction for a delivery year and subsequently elects to accept a State Subsidy for any part of that delivery year, then the resource may not receive capacity market revenues for any part of that delivery year.[312] We also direct PJM to include in its compliance filing a provision stating that if a new resource claims the Competitive Exemption in its first year, then subsequently elects to accept a State Subsidy, that resource may not participate in the capacity market from that point forward

[308] Vistra Initial Testimony at 15.

[309] NRG Reply Testimony at 28.

[310] AES Initial Testimony at 26.

[311] *See supra* note 5.

[312] The resource would, however, be eligible for capacity market revenues for the relevant delivery year if it could demonstrate under the Unit-Specific Exemption that it would have cleared in the relevant capacity auction.

for a period of years equal to the applicable asset life that PJM used to set the default offer floor in the auction that the new asset first cleared.[313] We find that, absent this change, PJM's proposed language would allow gaming and incent the creation of subsidy programs timed to avoid the qualification window.

### 2. Renewable Portfolio Standards Exemption

#### a. PJM's Proposal

163. PJM proposes to exclude voluntary REC[314] programs, stating that a "renewable energy credit (including for onshore and offshore wind, as well as solar, collectively, RECs) will not be considered a Material Subsidy, if the Capacity Market Seller sells the REC to a purchaser that is not required by a state program to purchase the REC, and that purchaser does not receive any state financial inducement or credit for the purchase of the REC."[315] PJM asserts that voluntary bilateral arrangements for RECs are unrelated to statutory RPS program requirements because the demand for voluntary RECs comes primarily from private corporations pursuing environmental agendas. PJM thus believes that voluntary REC purchases are distinguishable from the bulk of REC purchases made to show compliance with state RPS program mandates.[316]

164. PJM does not propose to exempt mandatory REC programs (although, as PJM notes, a 20 MW unforced capacity materiality threshold, as proposed by PJM, would, in practice, exclude the majority of renewable resources).[317] Given the difficulty of tracing REC transactions after the initial purchase, PJM proposes to presume that any REC sales

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[313] Elsewhere in this order, we accept the 20-year asset life PJM proposed. If that value is modified in future proceedings, the period of years for which the resource may not participate in the capacity market must be modified accordingly.

[314] PJM maintains its Generation Attribute Tracking System as a trading platform designed to meet the needs of buyers and sellers involved in the REC market. The REC becomes a commodity the generation owner can now sell to an interested buyer. Buyers can vary from electric utilities to brokers or aggregators, to environmental firms or to non-industry companies looking to neutralize their carbon footprint. Load serving entities (LSE) may meet state RPS program mandates through RECs, but it is not the only way to meet RPS program requirements.

[315] PJM Initial Testimony at 21; proposed Tariff, Art. I, Material Subsidy definition.

[316] PJM Initial Testimony at 24-25.

[317] *Id.* at 18.

to an intermediary are to meet mandatory RPS programs, and therefore not exempt. PJM also states that if the subsidy to a generator takes some other form than a traditional bilateral REC transaction between private entities, the proposed Tariff language would not shield the financial inducements or credits from the MOPR. PJM adds that, because the going-forward costs of renewable resources are typically low, it does not expect the application of the MOPR to RECs to materially impact the ability of renewable resources to clear the auction.[318]

**b. Intervenor Positions**

165. Several intervenors support an exemption for resources receiving revenue through RPS programs generally or RECs specifically.[319] According to intervenors, RECs do not have a price suppressive impact on the market and should be excluded from MOPR.[320] Intervenors argue that RECs are not predictable enough to cause a resource to be built or to modify its offer.[321] For example, intervenors argue that RECs are not created and sold until very close to the time when a renewable energy project enters commercial operation, well after resources have submitted their capacity offers, and thus do not materially impact capacity offers.[322] DC People's Counsel also explains that the District of Columbia's REC auction occurs annually, which can make it difficult for resources to

[318] *Id*. at 23 n.39.

[319] ACORE Initial Testimony at 1-2; AEE Initial Testimony at 10-12; Brookfield Initial Testimony at 8-9; Brookfield Reply Testimony at 5-7; Buyers Group Initial Testimony at 7; Clean Energy Advocates Initial Testimony at 24; DC Attorney General Initial Testimony at 10; DC Commission Initial Testimony at 4; Maryland Commission Reply Testimony at 10-11.

[320] Brookfield Reply Testimony at 8 (citing a 2018 Market Monitor report finding that the clearing price was not impacted by the removal of wind and solar resources).

[321] Clean Energy Advocates Initial Testimony at 24-27; Brookfield Initial Testimony at 9; ACORE Initial Testimony at 3; AEE Initial Testimony at 10; Clean Energy Industries Initial Testimony at 15.

[322] AEE Initial Testimony at 13; ACORE Initial Testimony at 3; Clean Energy Industries Initial Testimony at 15, 17; Clean Energy Industries Reply Testimony at 14-15; DC People's Counsel Initial Testimony at 8.

bid into PJM's three year forward capacity auction using any assumptions of their REC price.[323]

166. Intervenors further argue that RPS programs do not impact bidding behavior because REC prices are a result of a competitive market (e.g., supply and demand), and therefore REC prices are volatile.[324] According to AEE, REC prices are increasingly low as the costs of renewable projects continue to decline.[325]

167. Intervenors argue that the financial support received by resources through RPS program requirements has not been shown to have a meaningful impact on capacity offers by these resources or allow otherwise uncompetitive resources to clear the capacity market.[326] DC Commission argues the percentage of renewable energy in PJM is about 4 percent, which is insignificant and should be exempt from the MOPR.[327] Intervenors argue that RPS programs tend to have minimal, if any, impact on capacity markets after they have been in effect for more than a few years, because the growth of renewable resources outpaces the RPS program requirements.[328]

168. Should the Commission decide to apply the MOPR to RECs, AEE urges the Commission to avoid over-mitigation by confining application of the MOPR to RECs substantial and reliable enough to actually influence a resource's offer, which AEE explains is likely only true in the rare instances where a state policy directly sets both the price and term of the REC, ensuring that a specific resource will receive certain revenues,

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[323] DC People's Counsel Initial Testimony at 8.

[324] Clean Energy Advocates Initial Testimony at 25-26. DC Attorney General Initial Testimony at 10; Clean Energy Industries Initial Testimony at 3, 13, 20-21; DC Commission Initial Testimony at 8; Brookfield Reply Testimony at 7; AEE Initial Testimony at 10-11; DC Attorney General Initial Testimony at 9-10.

[325] AEE Initial Testimony at 11.

[326] *Id*. at 10; Clean Energy Industries Initial Testimony at 13.

[327] DC Commission Initial Testimony at 7; *see also* Maryland Commission Reply Testimony at 10 (arguing renewable resources should be exempted from the MOPR because they have a relatively low level of penetration and they are unlikely to be mitigated under the MOPR regardless).

[328] Clean Energy Groups Reply Testimony at 4.

known in advance, for an extended time period. Because those instances are so rare, AEE argues, a MOPR that applies to all RECs would be administratively burdensome.[329]

169. Some intervenors argue that RECs are not subsidies of the type the Commission addressed in the June 2018 Order because they do not suppress capacity prices[330] or because they do not function by creating specific price supports for specific resource classes.[331] PJM Consumer Representatives argue that RECs and RPS programs do not involve requirements for dollar transfers from electricity consumers to certain generators, and are therefore not subsidies.[332]

170. Several intervenors argue that the Commission should not mitigate RECs purchased voluntarily as a result of consumer preferences.[333] Intervenors argue that voluntary REC purchases are not driven by state policies, are a result of private actions, and are outside the Commission's jurisdiction.[334] To avoid mitigating voluntary RECs, AEE requests the Commission allow renewable resources to certify that they will not retire any RECs for the purposes of mandatory state compliance, or, alternatively, that they will retire less than one percent of their total project revenue's worth of RECs for state RPS program compliance.[335]

171. Several intervenors point to potential problems with PJM's proposal to not exempt voluntary RECs sold through intermediaries, arguing that such purchases cannot reasonably be assumed to be used solely, or even mostly, for state compliance

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[329] AEE Initial Testimony at 14.

[330] Brookfield Initial Testimony at 9.

[331] Clean Energy Advocates Initial Testimony at 24.

[332] PJM Consumer Representatives Reply Testimony at 6.

[333] ACORE Initial Testimony at 2; AEE Initial Testimony at 15; AES Initial Testimony at 19-20; Avangrid Initial Testimony at 10; Brookfield Initial Testimony at 9-10; Clean Energy Industries Initial Testimony at 6; Buyers Group Initial Testimony at 6, 8-9; Clean Energy Industries Reply Testimony at 11.

[334] ACORE Initial Testimony at 2-3; *see also* Clean Energy Industries Reply Testimony at 11.

[335] AEE Initial Testimony at 16-17.

purposes.[336] Microsoft explains that it always uses any RECs it procures and so never receives any financial benefit from the RECs, even when it uses intermediaries such as brokers to procure the RECs.[337] If this aspect of PJM's proposal is accepted, Microsoft asserts that the capacity offers associated with these RECs would be artificially inflated, without achieving the objective of mitigating price suppression from state subsidies.[338]

172. Conversely, a number of intervenors oppose MOPR exemptions generally, and a few specifically oppose an exemption for renewable resources, arguing that all subsidies should be mitigated.[339]

### c. Commission Determination

173. We find that a limited exemption for renewable resources[340] receiving support from state-mandated or state-sponsored RPS programs[341] is just and reasonable. Therefore, we direct PJM to include an RPS Exemption for resources receiving a State Subsidy through a currently existing state-mandated or state-sponsored RPS program if the resource fulfills at least one of these criteria: (1) has successfully cleared an annual or incremental capacity auction prior to this order; (2) has an executed interconnection construction service agreement on or before the date of this order; or (3) has an

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[336] Buyers Group Reply Testimony at 9-13. Buyers Group notes the growth in demand for voluntary RECs and states that in 2017, nearly half of all voluntary market sales of renewable energy were unbundled REC sales (e.g., not compliance bulk sales). Buyers Group Reply Testimony at 11-12; *see also* Clean Energy Industries Reply Testimony at 9; Clean Energy Advocates Reply Testimony at 13-14; Microsoft Reply Testimony at 5-7.

[337] Microsoft Reply Testimony at 4-6.

[338] *Id*. at 6-7.

[339] *See, e.g.*, Vistra Initial Testimony at 16; ACCC/NMA Initial Testimony at 4.

[340] Renewable resource as used in the RPS Exemption means Intermittent Resource as defined in the PJM Tariff as "a Generation Capacity Resource with output that can vary as a function of its energy source, such as wind, solar, run of river hydroelectric power and other renewable resources." PJM Tariff, Art. 1.

[341] RPS programs include only those state-mandated or state-sponsored programs which subsidize or require the procurement or development of energy from renewable resources.

unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of this order.

174. We find that this limited exemption for resources participating in RPS programs is just and reasonable because decisions to invest in those resources were guided by our previous affirmative determinations that renewable resources had too little impact on the market to require review and mitigation.[342] However, that assessment of renewable resource participation in the market has changed.[343] The evidence in this proceeding shows that RPS programs are growing at a rapid pace, and resources participating in these programs will increasingly have the ability to suppress capacity market prices.[344] Accordingly, a new renewable resource that does not meet the exemption requirements set forth above and that receives support from a state-mandated or state-sponsored RPS program or other State Subsidies and offers into the PJM capacity market will be subject to the default offer price floor unless it can justify a lower offer through a Unit-Specific Exemption.[345]

175. This division in the treatment of renewable resources recognizes the increasing amount of State Subsidies for these resources and the increasing potential for RPS resources to suppress capacity prices. The record demonstrates that, as a part of RPS programs, states are providing or requiring meaningful State Subsidies to renewable resources in the PJM capacity market, and that such support is projected to increase substantially in the future. PJM estimates that nearly 5,000 MW of renewable energy

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[342] *See, e.g.*, 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 166-167; 2011 MOPR Order, 135 FERC ¶ 61,022 at PP 152-153; 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 111.

[343] In addition, as our discussion of materiality thresholds indicates, the Commission has altered its prior determination that permitting small amounts of uneconomic entry is reasonable if the impact on market prices is arguably limited. *See supra* PP 98-99; *cf.* CASPR Order, 162 FERC ¶ 61,205 at P 24 (accepting modifications to the MOPR used in ISO-New England to transition away from the Renewable Resource Technology exemption, which was premised on claims it "would adequately limit the impact of out-of-market state actions on [Forward Capacity Market] prices").

[344] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 151.

[345] As we explained above, this does not prevent states from exercising their jurisdiction to make generation-related decisions under FPA section 201. States may choose to acquire whatever generation resources they like, but it remains the duty of this Commission to ensure that those choices do not cause unjust, unreasonable, or unduly discriminatory or preferential rates for wholesale transactions in interstate commerce. *See, e.g.*, *Connecticut PUC*, 569 F.3d at 481; *supra* note 23.

was needed to meet the 2018 RPS program requirements in PJM, but conservatively projects that will increase to over 8,000 MW of renewable energy capacity by 2025. PJM asserts that these needs will further increase to 8,866 MWs by the end of 2033.[346] The record also shows that support for renewable resources through RPS programs drives the proliferation of these resources in the market.[347] Regardless of how volatile and uncertain revenue from RPS programs may be, it is still a State Subsidy that has the ability to influence capacity market prices. Thus, because State Subsidies from state RPS programs are projected to grow significantly, we find that it is just and reasonable to mitigate resources receiving support through state-mandated and state-sponsored RPS programs, on the prospective basis outlined above.

176. In addition, as noted above, we reiterate that State Subsidies at any level are capable of suppressing capacity market prices. We therefore find that RECs procured as part of a state-mandated or state-sponsored procurement process are State Subsidies. As to voluntary REC arrangements, meaning those which are not associated with a state-mandated or state-sponsored procurement process, based on the record in this proceeding, we agree with intervenors that it is not possible, at this time, to distinguish resources receiving privately funded voluntary RECs from state-funded or state-mandated RECs because resources typically do not know at the time of the auction qualification process how the REC will be eventually used.

177. We disagree with intervenors that RPS programs are not subsidies as contemplated in the June 2018 Order, or that RPS programs will not have the ability to impact capacity market prices or bidding behavior going forward. The June 2018 Order found that the existing MOPR was unjust and unreasonable because it did not account for resources receiving out-of-market state subsidies, including RPS programs, and that such subsidies have the ability to influence capacity market prices, regardless of intent.[348] Because of the Unit-Specific Exemption, if a renewable resource receiving support from a state-mandated or state-sponsored RPS program is competitive in the absence of the State Subsidy, then the expanded MOPR will have no impact. As noted in the materiality threshold discussion above, we disagree with PJM that resources with an unforced capacity of less than 20 MWs, which includes many renewable resources, do not have the ability to influence capacity market prices.

[346] June 2018 Order, 163 FERC ¶ 61,236 at PP151-152 (citing PJM Transmittal Letter, Docket No. ER18-1314-000, Giacomoni Aff. at 9-10 and Att. 1).

[347] PJM Transmittal Letter, Docket No. ER18-1314-000, Att. F, Giacomoni Aff. at 7-8.

[348] June 2018 Order, 163 FERC ¶ 61,236 at P 151.

### 3. Self-Supply Exemption

#### a. PJM's Proposal

178. PJM proposes to re-implement its previously approved exemption for self-supply resources,[349] i.e., resources owned by a public power entity (cooperative or municipal utility), a vertically integrated utility subject to traditional bundled rate regulation, or a LSE that serves retail-only customers under the same common control.[350] In other words, PJM would not treat these resources as receiving a Material Subsidy simply because the energy or capacity they produce has been purchased through a state-directed procurement.[351] According to PJM, the Commission has recognized that the traditional business models for capacity procurement for self-supply entities do not give rise to artificial price suppression concerns.[352]

179. Under PJM's proposal, all existing self-supply resources would be exempt from the MOPR,[353] and new self-supply resources that receive a Material Subsidy would be

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[349] PJM Initial Testimony at 32-34 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at P 111).

[350] *Id*. at 32-33.

[351] In its reply testimony, PJM clarifies that the element of the phrase in the definition of Material Subsidy that includes subsidies "received as a result of the procurement of electricity or other attribute from an existing Capacity Resource" should not be broadly interpreted so as to include any state-directed capacity procurement. Rather, PJM intends the definition to be narrowly applied "so that if a resource is supported by the state through a procurement contract that is tendered to meet public policy goals such as to encourage clean energy production *and* accompanied by financial support in the form of actionable subsidies (as that term is defined in PJM's Tariff)," that would be treated as a subsidy like a ZEC or REC. PJM Reply Testimony at 13 (citing Exelon Initial Testimony at 16-21).

[352] PJM Initial Testimony at 33 (citing 2013 MOPR Order, 143 FERC¶ 61,090 at P 111).

[353] *Id*. at 33-34. PJM clarifies that self-supply LSEs do not have to submit an exemption request for each of their resources, and any new resources of self-supply LSEs that fall within the net-short and net-long thresholds would similarly be exempt. PJM Reply Testimony at 15.

exempt to the extent they meet PJM's net-short and net-long thresholds.[354] PJM asserts that these thresholds ensure that sellers do not have an opportunity to suppress clearing prices (for example, by "dumping" excess capacity into the BRA, suppressing capacity prices).[355] PJM claims that these thresholds cannot be applied to existing resources because, while PJM can objectively determine whether new resources would violate the thresholds, PJM would have to make a subjective and arbitrary determination to identify which existing resources in a seller's portfolio are, in the example of a seller who is net-long, "excess," versus which resources are needed to meet its retail demand and thus should be designated as subject to the MOPR.[356]

### b. Intervenor Positions

180. Several intervenors argue in favor of a self-supply, public power, or vertically integrated utility exemption.[357] These intervenors make a number of arguments, including that these entities cannot or do not have incentive to exercise the buyer-side market power price suppression concerns that the MOPR is designed to address;[358] that

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[354] If a resource is net-short on capacity, its owned and contracted capacity is less than its capacity obligation. If a resource is net-long on capacity, it has more capacity than it needs to meet its capacity obligation.

[355] PJM Reply Testimony at 15. PJM states that these thresholds were approved in the 2013 PJM MOPR Order and reaffirmed by PJM stakeholders last year. PJM Initial Testimony at 33.

[356] PJM Initial Testimony at 33-34.

[357] *See, e.g.*, Allegheny Initial Testimony at 6; ELCON Initial Testimony at 7; Dominion Initial Testimony at 3, 11-13; AMP/PPANJ Initial Testimony at 17-27; AEP/Duke at 7-8; Buckeye Initial Testimony at 5-6, 10-11 (supporting a self-supply exemption, as a minimum, if a workable resource-specific FRR is not implemented); EKPC Initial Testimony at 6-10; APPA Initial Testimony at 5-27 (arguing that the Commission should either exclude public power self-supply resources from the MOPR entirely, or adopt a broad exemption); Kentucky Commission Initial Testimony at 3-4 (asserting that vertically integrated utilities should be excluded entirely from the MOPR); NOVEC Initial Testimony at 7-8; NRECA Initial Testimony at 17-18; OCC Initial Testimony at 6; ODEC Initial Testimony at 6-12; OPSI Initial Testimony at 14; PJM Consumer Representatives Initial Testimony at 20; SMECO Initial Testimony at 4; Virginia SCC Initial Testimony at 2; AMP Reply Testimony at 11-12.

[358] *See, e.g.*, Allegheny Initial Testimony at 7 (citing Commission findings in 2013 MOPR Order, 143 FERC ¶ 61,090); AMP/PPANJ Initial Testimony at 20-27; Dominion Initial Testimony at 12; EKPC Initial Testimony at 7-8; Kentucky Commission Initial Testimony at 3; NOVEC Initial Testimony at 7; ODEC Initial Testimony at 9; Virginia

these entities do not distort the PJM capacity market;[359] that applying the MOPR to these entities could result in consumers paying twice for capacity or incurring the cost of stranded investment;[360] and that the Commission has previously exempted these resources.[361] NOVEC argues that not exempting self-supply resources would result in an artificial increase of market prices without any benefit to customers.[362]

181. Other intervenors argue self-supply should be exempted as a long standing traditional business model.[363] APPA argues that there is no evidence of increased out-of-market support for public power self-supply, and, given that the public power business model has been in existence for over one hundred years, there are no changed

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SCC Initial Testimony at 2; AMP/PPANJ Initial Testimony at 27; NRECA Initial Testimony at 19.

[359] *See, e.g.*, APPA Reply Testimony at 12-13; AMP/PPANJ Initial Testimony at 8-17; Virginia SCC Initial Testimony at 2; Michigan Parties Reply Testimony at 6; ODEC Reply Testimony at 9; *see also* Dominion Initial Testimony, Aff. Spees and Newell at 14; Dominion Reply Testimony at 5; IMEA Reply Testimony at 14 (arguing vertically integrated utilities maintain a balance of supply and demand that precludes such entities from suppressing capacity prices);AMP/PPANJ Initial Testimony at 16-17, Norton Aff. at PP 7-12 (arguing the federal tax incentives received by such entities to build generation do not permit over-building or market manipulation).

[360] Dominion Initial Testimony at 8; Allegheny Initial Testimony at 8; APPA Initial Testimony at 10; APPA Initial Testimony at 16-17; Buckeye Initial Testimony at 12; NRECA Initial Testimony at 3; ODEC Initial Testimony at 8; Virginia SCC Initial Testimony at 2.

[361] Dominion Initial Testimony at 12 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at P 111); APPA Initial Testimony at 17-20 (citing 2013 MOPR Order, 143 FERC ¶ 61,090)); NRECA Initial Testimony at 23 (citing 2015 MOPR Order, 153 FERC ¶ 61,066 at PP 36-38); ODEC Initial Testimony at 8-9; EKPC Initial Testimony at 9 (citing 2013 MOPR Order, FERC ¶ 61,090 at P 111); IMEA Reply Testimony at 15; Virginia SCC Initial Testimony at 2; AMP/PPANJ Initial Testimony at 17-20.

[362] NOVEC Initial Testimony at 5.

[363] *See, e.g.*, Allegheny Initial Testimony at 6-8; Buckeye Initial Testimony at 7-8, 11; NRECA Initial Testimony at 3; ODEC Initial Testimony at 9; AMP/PPANJ Initial Testimony at 20-24; NOVEC Initial Testimony at 5.

circumstances warranting labeling public power self-supply out-of-market support.[364] According to Dominion, self-supply entities have participated in the capacity market for years prior to price suppression becoming an issue, which demonstrates that such entities do not suppress prices.[365]

182. Some intervenors argue that public power entities are distinguishable from investor-owned utilities because public power or self-supply entities engage in long-term supply arrangements through asset ownership to act in the best interests of their customers and must be able to use these resources to meet capacity obligations in order to avoid unreasonable harm to ratepayers and public power entities.[366] In contrast, AMP/PPANJ states that investor-owned utilities and independent power producers are profit driven and have an incentive to increase capacity prices.[367] According to AMP/PPANJ, if these other business models receive a state subsidy, unlike public power entities, they do not have an obligation to reduce retail rates.[368]

183. APPA contends that accommodating public power self-supply resources would mitigate concerns that the merchant model is heavily relied upon in PJM.[369] APPA argues that merchant developers do not pursue long-term resource planning and notes that PJM recently determined that increased reliance on a single resource type increases resilience concerns.[370] APPA states that self-supply represents a stable form of resource procurement via bilateral contracting and ownership of resources by states, utilities, and large customers.[371]

[364] APPA Initial Testimony at 13.

[365] Dominion Reply Testimony at 9.

[366] AMP/PPANJ Initial Testimony at 22-24; *see also* NRECA Reply Testimony at 7.

[367] AMP/PPANJ Initial Testimony at 13-14.

[368] *Id.* at 14.

[369] APPA Initial Testimony at 22-23.

[370] *Id.* at 22 (citing PJM's Evolving Resource Mix and System Reliability, PJM Interconnection, L.L.C. (Mar. 30, 2017)).

[371] *Id*. at 23.

184. Some intervenors argue that public power[372] or vertically integrated[373] self-supply resources do not receive the type of subsidies discussed in the June 2018 Order.[374] Similarly, ODEC argues that cooperatives do not receive state subsidies because they recover costs through a cost of service formula rate and not through a state-mandated subsidy.[375] AEP/Duke support an exemption for all regulated retail rate constructs.[376] The Kentucky Commission asserts the retail rates set by the Kentucky Commission should not be considered Material Subsidies.[377] IMEA similarly argues that municipality, local government, or municipal joint action agencies acting in their proprietary, non-governmental capacity, to fulfill long-term service obligations of their own customers and funded by the rates paid by such customers, not taxes paid by their citizens, are not government subsidies.[378]

185. Several intervenors also argue that self-supply entities do not make decisions based on the PJM capacity market's comparatively short-term outlook, but rather longer term obligations and non-price factors, and their investments are not constrained by the capacity market's three year horizon.[379] Some intervenors point to state or local commissions that oversee self-supply entities and ensure they are acting judiciously in the best interests of their customers.[380] ODEC asserts that without an exemption to the

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[372] SMECO Initial Testimony at 4; AMP/PPANJ Initial Testimony at 10, 14-17; AMP Reply Testimony at 12; APPA Initial Testimony at 5.

[373] Virginia SCC Initial Testimony at 2.

[374] *See, e.g.*, AEP/Duke Initial Testimony at 4; NRECA Initial Testimony at 17; APPA Initial Testimony at 11-12.

[375] ODEC Initial Testimony at 11.

[376] AEP/Duke Initial Testimony at 5.

[377] Kentucky Commission Initial Testimony at 3.

[378] IMEA Reply Testimony at 9.

[379] *See, e.g.*, Allegheny Comment at 7-8; NRECA Initial Testimony at 17; NOVEC Initial Testimony at 7; AMP/PPANJ Initial Testimony at 15-16; AMP/PPANJ Initial Testimony at 13-14; AMP Reply Testimony at 13; APPA Reply Testimony at 14-15; ODEC Initial Testimony at 6, 11.

[380] *See, e.g.*, EKPC Initial Testimony at 9; Dominion Initial Testimony, Aff. of Dr. Kathleen Spees & Dr. Samuel A. Newell at 17; Dominion Reply Testimony at 10

MOPR, self-supply entities will not have an incentive for the long-term investments the Commission has encouraged.[381]

186. Some intervenors emphasize that self-supply is a legitimate capacity procurement mechanism that is compatible with capacity markets and relies on competition to ensure low cost service to customers.[382] NRECA argues that the customer-owners of public power entities bear any gain or loss associated with investment decisions, and the public power entity business model—i.e., ownership structure, tax treatment, and resource selection process—is consistent with and benefits from the competitive market framework.[383]

187. Some intervenors reject the idea that all resource entry and exit in the market should be considered economic or, similarly, that all capacity must be procured in the capacity market to be economic.[384] Some intervenors also argue that not exempting self-supply would prioritize future signals for future investors over the decisions made by investors building under the existing rules.[385] ODEC argues that there is nothing unique about capacity market revenues that make them more legitimate than revenue from bilateral contracts.[386] NRECA argues that an exclusion from the MOPR for self-supply by public power entities is consistent with the initial purpose of the PJM capacity auctions, which was to serve as a residual procurement mechanism of last resort, after LSEs have had an opportunity to self-supply.[387]

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(arguing also that merchant investment in resources has continued even with self-supply entities participating in the capacity market).

[381] ODEC Initial Testimony at 21.

[382] NRECA Initial Testimony at 3, 20; *see also* APPA Initial Testimony at 6-7, 12-13.

[383] NRECA Initial Testimony at 20.

[384] APPA Initial Testimony at 14; *see also* NRECA Initial Testimony at 20.

[385] IMEA Reply Testimony at 15; APPA Initial Testimony at 15.

[386] ODEC Initial Testimony at 6; *see also* NRECA Initial Testimony at 18; NOVEC Initial Testimony at 8.

[387] NRECA Initial Testimony at 18 (citing *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079 at P 71).

188. Some intervenors argue that subjecting self-supply resources to the MOPR would harm the markets. APPA argues that mitigation of public power self-supply resources would result in an economic loss to the resource, reduce market efficiency, undermine the resource's portfolio benefits, and expose public power utility customers to costs that the public power self-supply business model is intended to prevent.[388] APPA asserts that expanding the MOPR to public power self-supply resources would send incorrect price signals to the market.[389] Dominion asserts that imposing a MOPR or other restrictions on self-supply may cause self-supply entities to exit the capacity market, detrimentally impacting customers of both self-supply and merchant resources.[390]

189. IMEA argues that small, transmission-dependent utilities like IMEA and its member municipalities did not need or ask for the RTO markets and use them only because of the decisions made by the transmission-owning utilities upon which they rely. IMEA argues that it does not, therefore, make sense to force IMEA to charge its customers higher rates because other market participants, who may have actively sought the RTO market, are taking actions that adversely affect the capacity market. IMEA states that it is not one of those participants and is not making uncompetitive bids or supporting generation with out-of-market payments. IMEA claims that it made investments in its generation based on the economic environment at the time, and should be able to continue using its resources to serve load regardless of whether it may be more economic for IMEA to buy capacity from the market than to use its own at a specific time.[391]

190. Other intervenors oppose an exemption for self-supply, public power, or vertically integrated utilities, arguing that self-supply resources receive the most extensive form of out-of-market payments via retail cost-recovery and therefore have the greatest potential to suppress market clearing prices.[392] Exelon argues that these resources make up a substantial portion of the PJM portfolio, almost 20 percent of cleared capacity today and

[388] APPA Initial Testimony at 16-17.

[389] *Id*. at 10.

[390] Dominion Initial Testimony, Aff. of Spees & Newell at 19-20.

[391] IMEA Reply Testimony at 13.

[392] AES Initial Testimony at 14-16; Direct Energy Initial Testimony at 10-11; Clean Energy Advocates Initial Testimony at 2, 20; Exelon Initial Testimony at 5-6, 18-20; Buyers Group Initial Testimony at 11; AEE Initial Testimony at 25; FES Initial Testimony at 7; Market Monitor Initial Testimony at 18; NRG Initial Testimony at 11; P3 Initial Testimony at 12; PSEG Initial Testimony at 7; UCS Initial Testimony at 8; Cogentrix Reply Testimony at 10; EPSA Reply Testimony at 25.

nearly twice the capacity that PJM forecasts will be supported by states for environmental reasons as of 2025.[393] UCS argues that 30 percent of new capacity cleared in the RPM auctions since 2010 was from vertically integrated utilities, far exceeding, UCS claims, the threshold PJM's testimony describes as impacting the clearing price.[394]

191. Some intervenors argue that there is no economic rationale to apply the MOPR to resources receiving environmental attribute payments, but exempt resources receiving guaranteed cost recovery through retail rates.[395] Clean Energy Advocates states that, unlike RECs and ZECs, retail cost-recovery reimburses the resource for the full cost of making capacity available and thus retail cost-recovery is more significant and determinative in impacting bidding behavior than subsidies for RECs and ZECs.[396] Exelon asserts that resources with guaranteed cost recovery through retail rates are not subject to competitive forces and are protected from any negative impacts of their bidding behavior, and cannot, therefore, be considered competitive.[397] P3 notes that, because the self-supply resource owner is assured full prudent cost recovery, regardless of the clearing price, it will have the incentive to offer at zero, and thereby lean on the rest of the market, when convenient, to reduce the costs of carrying surplus capacity at the expense of other load, while at the same time suppressing prices for competitive suppliers.[398]

192. Some intervenors argue that a self-supply exemption would not be consistent with the logic of the June 2018 Order.[399] FES argues that exempting rate-based generation from the MOPR would be unduly discriminatory and preferential, and that there is no

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[393] Exelon Initial Testimony at 19.

[394] UCS Initial Testimony at 4-5.

[395] Exelon Initial Testimony at 5-6, 18; FES Initial Testimony at 7; Clean Energy Advocates Initial Testimony at 20; Clean Energy Advocates Reply Testimony at 9-10.

[396] Clean Energy Advocates Initial Testimony at 20-21; Clean Energy Advocates Reply Testimony at 10; *see also* FES Initial Testimony at 8.

[397] Exelon Initial Testimony at 18.

[398] P3 Initial Testimony at 12-13. P3 states, however, that it would accept PJM's proposed self-supply exemption as a transition mechanism for the 2019 BRA only. P3 Reply Testimony at 8; Clean Energy Advocates Initial Testimony at 20.

[399] FES Initial Testimony at 8; Clean Energy Advocates Initial Testimony at 22-23; Exelon Initial Testimony at 19; Exelon Reply Testimony at 56-60.

basis on which to exempt resources based on the source of funding.[400] Clean Energy Advocates similarly argues that retail cost-recovery decisions result in both retention of uneconomic resources and entry of new uneconomic resources, citing to a number of resources it claims would be uneconomic absent state-approved retail cost recovery.[401] PSEG argues that the self-supply exemption cannot be supported by principled rationale since the Commission has now found the capacity market—with that exemption–to be unjust and unreasonable.[402] UCS states that the Commission's order, and PJM's own rationale and commitment to the "first principles" of capacity markets, do not support a MOPR exemption for state-supported cost recovery.[403] Similarly, Exelon argues that exempting self-supply contradicts the Commission's objectives in the June 2018 Order, including ensuring that participants make competitive offers in the capacity market and increasing transparency for the costs of regulatory choices.[404] Exelon argues it makes little sense for the Commission to mitigate resources receiving environmental attribute payments in order to increase transparency regarding the costs of re-regulation, but exempt regulated resources and thereby obscure the costs of maintaining state regulation.[405]

193. NRG argues a self-supply exemption would cause captive ratepayers to pay for capacity at higher costs than they would have paid in the capacity market and displace merchant generation with subsidized resources.[406] NRG claims the self-supply exemption in effect in PJM from 2013 to 2017 resulted in price suppression.[407]

194. Though self-supply and vertically integrated entities have argued that they have no incentive to exercise buyer-side market power, Exelon contends that the June 2018 Order found that the MOPR should mitigate resources offering noncompetitively regardless of

[400] FES Initial Testimony at 8; FES Reply Testimony at 10; *see also* UCS Reply Testimony at 3.

[401] Clean Energy Advocates Initial Testimony at 22-23.

[402] PSEG Initial Testimony at 7.

[403] UCS Initial Testimony at 6.

[404] Exelon Initial Testimony at 19; Exelon Reply Testimony at 56-58.

[405] Exelon Initial Testimony at 19.

[406] NRG Initial Testimony at 11.

[407] *Id*. at 11-12.

intent.[408] Exelon similarly disagrees with arguments that such resources should not be mitigated because of their long-standing business models, arguing that this is not an adequate basis for disparate treatment and, in any event, attribute payments are similarly longstanding.[409] Clean Energy Advocates likewise states that if an argument for exempting self-supply is the legitimacy of the business model, then ZEC and REC programs are similarly legitimate.[410] Direct Energy argues that there is no basis to distinguish one resource from another based on corporate structure.[411]

195. NRG's witness Mr. Stoddard asserts that a self-supply exemption would allow "net short entities that rely on the purchase of top-up capacity from the RPM" to benefit from the resulting market price suppression of below-cost offers, and would allow net long entities "to push uneconomic resources into the market, displacing lower cost resources," that would be profitable if the self-supply entity would otherwise have borne the full cost of maintaining this uneconomic supply.[412]

196. With regard to net-short/net-long thresholds, some intervenors support PJM's proposed net-short and net-long thresholds, arguing they would effectively deter self-supply entities from attempting to suppress prices.[413] Some intervenors support the thresholds only for new resources[414] and argue there is no need to apply them to existing

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[408] Exelon Initial Testimony at 19 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 155); *see also* FES Reply Testimony at 11 (arguing that self-supply resources contribute to price suppression).

[409] Exelon Initial Testimony at 20; Exelon Reply Testimony at 59 n.195; Clean Energy Advocates Reply Testimony at 10; FES Reply Testimony at 11.

[410] Clean Energy Advocates Reply Testimony at 10.

[411] Direct Energy Initial Testimony at 11; *see also* ACORE Initial Testimony at 1-3 (while not opposing a self-supply exemption, noting that the MOPR should be applied evenly across resource types).

[412] NRG Initial Testimony, Stoddard Aff. at P 17.

[413] AMP/PPANJ Initial Testimony at 24-27 (arguing that public power entities do not have the ability to manipulate the market, but nonetheless supporting the thresholds). Although objecting to the self-supply exemption overall, Exelon asserts that if the exemption is nevertheless approved, it should not be applied to net long resources. Exelon Reply Testimony at 59-60.

[414] Buckeye Initial Testimony at 5-6, 10-11; Buckeye Reply Testimony at 2 (supporting thresholds for new resources that have not cleared the capacity market);

resources.[415] Michigan Parties argue that the net-short/net-long thresholds allow vertically integrated resources to better match their capacity to their load in the short term, as well as trade excess capacity, resulting in cost savings for their customers and increased efficiency for the PJM system as a whole.[416]

197. IMEA notes that the sales cap restriction for the existing FRR option is set at 25 percent up to certain caps, but that PJM departs from their value without explanation and proposes 15 percent for the mid-sized LSE MOPR exemption.[417]

198. EKPC states the net-long threshold is not required for the self-supply exemption to be just and reasonable, as municipal and cooperatives utilities do not have incentives to engage in market activities that suppress energy market prices, and that under the proposed expanded MOPR, net-long and net-short thresholds for new and existing resources are not workable because it would be impossible to determine which resources are in excess of the LSE's own load.[418] EKPC also contends that being long in capacity can provide other hedges. Specifically, EKPC notes that it is subject to a fuel adjustment clause that limits recovery of the costs of market energy purchases to its highest-cost unit. EKPC explains that it can therefore be very costly for EKPC to be short.[419] EKPC argues a net-long threshold based on non-coincident peak load provides the correct structure for the specific hedging associated with self-supply resources.[420] EKPC notes that a similar approach has been previously accepted by the Commission.[421]

199. EKPC also recommends the net-long threshold not be a fixed MW quantity but rather a percentage, so that self-supply utilities could develop new generation that is not

Dominion Reply Testimony at 5-6.

[415] APPA Initial Testimony at 25-27 (stating that a competitive offer for an existing resource would be low regardless of out-of-market support); ODEC Initial Testimony at 19 (noting that the threshold values should be the same as those that existed under the prior self-supply exemption and that a blanket exemption is preferable).

[416] Michigan Parties Reply Testimony at 8-9.

[417] IMEA Reply Testimony at 12.

[418] EKPC Initial Testimony at 11.

[419] *Id*. at 12 -13.

[420] *Id*. at 13.

[421] *Id*. at 13-14 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at P 114).

subject to MOPR rules.[422] EKPC contends that a utility developing a new plant to replace old generation may be considered to have excess capacity, but this should not be considered a business strategy to suppress capacity market prices.[423] EKPC concludes that a net-long threshold using a percentage of a LSE's non-coincident peak would allow for integration of new facilities without adverse impacts.[424]

200. Allegheny argues that PJM's net-short proposal to define Multi-State Public Power Entity as excluding a public power entity that has more than 90 percent of its load in any one state is unnecessary and discriminatory. Allegheny reasons that, because public power entities makes up a very small percentage of load served in PJM markets, such entities would not suppress prices.[425]

201. Some intervenors also disagree with PJM that the proposed net-long/net-short thresholds will help mitigate any concerns that self-supply could suppress prices. Clean Energy Advocates argue net-short/net-long thresholds are inconsistent with the new purpose of the MOPR, which is not related to price suppressive intent. Clean Energy Advocates note that, although the Commission has previously accepted similar thresholds for a self-supply exemption, the MOPR and accompanying thresholds were based on a seller's intent.[426]

### c. <u>Commission Determination</u>

202. We direct PJM to include a Self-Supply Exemption for resources owned by self-supply entities[427] that fulfill at least one of these criteria: (1) have successfully cleared an annual or incremental capacity auction prior to this order; (2) have an executed interconnection construction service agreement on or before the date of this order; or (3) have an unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of this order. As with RPS resources, we grandfather existing self-supply resources and limited new self-supply

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[422] *Id*. at 15.

[423] *Id*.

[424] *Id*. at 15-16.

[425] Allegheny Initial Testimony at 8-9.

[426] Clean Energy Advocates Initial Testimony at 23.

[427] These entities include vertically integrated utilities that receive cost of service payments for plants constructed and operated under state public utility regulation, public power, and single customer entities.

resources that have an interconnection construction service agreement as discussed in this order, but apply the MOPR to any new self-supply resource that receives or is entitled to receive a State Subsidy, unless they qualify for one of the exemptions described in this order. New State-Subsidized Resources that do not meet the exemption criteria above will be subject to the applicable default offer price floor regardless of whether they are owned by a self-supply entity. Self-supply entities that prefer to craft their own resource adequacy plans remain free to do so through the existing FRR Alternative in PJM's Tariff.

203. We find that it is just and reasonable to exempt self-supply resources that meet the requirements of the exemption outlined above because self-supply entities have made resource decisions based on affirmative guidance from the Commission indicating that those decisions would not be disruptive to competitive markets.[428] In order to limit disruption to the industry and preserve existing investments, we find it is just and reasonable to exempt resources owned by self-supply entities that have cleared an annual or incremental PJM capacity auction prior to this order, and to exempt certain limited new resources that have executed an interconnection construction service agreement or for whom PJM has filed an unexecuted interconnection construction service agreement on or before the date of this order. However, the self-supply exemption authorized in 2013 was a temporary reversal in Commission policy that the Commission rejected in acting on the remand of *NRG*, and we agree with intervenors that self-supply entities may have the ability to suppress prices going forward.[429] Therefore, we find that self-supply entities should not have a blanket exemption for any new State-Subsidized Resources they intend to own going forward. We see no reason to treat new resources owned by self-supply entities differently from resources owned by other types of electric utilities, and reiterate that we can no longer assume "that there is any substantive difference among the types of resources participating in PJM's capacity market with the benefit of out-of-market support."[430]

204. At bottom, a blanket self-supply exemption rests on the premise that some kinds of entities should face less risk than others in choosing whether to build their own generation resources or rely on the market to satisfy their energy and capacity requirements. We are not persuaded that premise is correct. For example, in a regional market dominated by states with retail competition, it is not clear why utilities in states

[428] 2013 MOPR Order, 143 FERC ¶ 61,090 at P 107 (accepting PJM's proposed self-supply exemption); 2015 MOPR Order, 153 FERC ¶ 61,066 at PP 52, 56.

[429] *See supra* PP 20-21.

[430] June 2018 Order, 163 FERC ¶ 61,236 at P 155; 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at PP 170-71 (out-of-market support allows uneconomic entry).

that prefer the vertical integration model should be afforded a competitive advantage.[431] Moreover, the record suggests that new self-supply capacity is significant, representing 30 percent of new generation added to PJM in capacity auctions from 2010 to 2017.[432] Since these resources may receive State Subsidies permitting uneconomic entry into PJM's capacity market, regardless of intent, we find that it is not just and reasonable to exempt new self-supply from application of the applicable default offer price floor. New self-supply resources that receive or are entitled to receive State Subsidies, as detailed in this order, may avail themselves of the Unit-Specific Exemption. In addition, self-supply entities that do not want to be subject to the MOPR may opt for the existing FRR Alternative.

### 4. Demand Response, Energy Efficiency, and Capacity Storage Resources Exemption

#### a. PJM's Proposal

205. PJM proposes that demand response resources will be subject to the MOPR, but that energy efficiency resources should be excluded, arguing that energy efficiency resources are a result of reduced consumption and energy conservation, which are on the demand side of the equation, and do not raise price suppression concerns.[433]

#### b. Intervenor Positions

206. Some intervenors support exempting demand-side management resources such as demand response and energy efficiency resources from the MOPR.[434] AEE argues that demand response and energy efficiency resources should be exempt because there is no

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[431] As the Commission has previously explained, regional markets are not required to have the same rules. Our determination about what rules may be just and reasonable for a particular market depends on the relevant facts. For example, ISO New England proposed to address the complex issues raised by state subsidies through its CASPR approach. *See* CASPR Order, 162 FERC ¶ 61,205 at PP 20-26. And different rules may be appropriate in markets dominated by vertically integrated utilities, like the Midcontinent ISO. *See Midcontinent Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,176, at P 57 & n.133 (2018) (listing cases that reject the "one-size-fits-all approach").

[432] UCS Initial Testimony at 4-5 (citing PJM 2018 April Filing at 9-10).

[433] PJM Initial Testimony at 15 n.20.

[434] AEE Initial Testimony at 20; Joint Consumer Advocates Initial Testimony at 14; *see also* Buyers Group Initial Testimony at 11; DC Commission Initial Testimony at 6; Pennsylvania Commission Reply Testimony at 15.

record evidence to demonstrate they receive the kind of support the Commission described in the June 2018 Order. AEE contends that demand response resources are fundamentally different than traditional generating resources, because they are charged for their retail peak capacity demand via retail pass-throughs of PJM's wholesale capacity charges, which generators are not.[435] Further, AEE states that demand response resources differ from generators in that they will stay in business regardless of price. Rather than participating in the capacity market to earn a return on their investment, demand response participates in the market to lower capacity costs.[436] AEE also argues that any default offer price floor to which demand response or energy efficiency resources are subject would be zero, because these resources have low avoidable costs, and so it would be administratively burdensome and make little sense to subject these resources to the MOPR. Conversely, OCC argues that demand response and distributed energy resources[437] funded by captive retail customers should not be exempt from MOPR. OCC further states that the Commission should clarify that distributed energy resources fall within the scope of demand response, and should include them within the scope of the MOPR if they receive subsidies.[438] FEU also argues that wholesale demand response should be subject to the MOPR because wholesale demand response is paid twice under the Commission's rules, and there is no principled reason to justify the exclusion.[439]

207. SMECO requests that the Commission direct PJM to provide an exemption for demand response resources that were recently capacity resources but may have paused

[435] AEE Initial Testimony at 20.

[436] *Id*. at 21.

[437] OCC cites to the Commission's definition of distributed energy resources as defined as a source or sink of power that is located on the distribution system, any subsystem thereof, or behind a customer meter. These resources may include, but are not limited to, electric storage resources, distributed generation, thermal storage, electric vehicles and their supply equipment, typically solar, storage, energy efficiency, or demand management installed behind the meter. OCC Initial Comments at 8 (citing *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators Electric Storage Participation in Regions with Organized Wholesale Electric Markets*, 157 FERC ¶ 61,121, at P1, n.2 (2016)).

[438] OCC Initial Testimony at 7. AES also supports subjecting demand response and distributed energy resources to the MOPR. AES Reply Testimony at 10.

[439] FEU Reply Testimony at 7.

recent RPM participation due to 100 percent performance rules.[440] SMECO requests that the Commission direct PJM to view such lapsed demand response programs as existing and not planned.[441]

### c. Commission Determination

208. We direct PJM to include a limited exemption for demand response, energy efficiency, and capacity storage resources. Demand response and energy efficiency resources that fulfill at least one of these criteria will be eligible: (1) have successfully cleared an annual or incremental capacity auction prior to this order; (2) have completed registration on or before the date of this order; or (3) have a measurement and verification plan approved by PJM for the resource on or before the date of this order. Capacity storage resources that fulfill at least one of these criteria will be eligible: (1) have successfully cleared an annual or incremental capacity auction prior to this order; (2) have an executed interconnection construction service agreement on or before the date of this order; or (3) have an unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of this order. Similar to the RPS Exemption, we find that it is reasonable to exclude these existing and limited new resources with an interconnection construction service agreement, registration, or approved measurement and verification plan from mitigation because traditionally they have been exempt from application of the MOPR[442] and market participants that reasonably relied on that guidance in formulating their business plans prior to the June 2018 Order were not on notice that they would be mitigated. We disagree with intervenors that demand response and energy efficiency resources should always be exempt from review and mitigation.[443] The replacement rate directed in this order is focused on ensuring that all resources make economic offers based on their expected costs and not any State Subsidies they may receive, regardless of resource type, and thus we find that it is just and reasonable to require new demand response, energy efficiency, and capacity storage resources that do not meet the above criteria to comply with the

[440] SMECO Initial Testimony at 8.

[441] *Id*. at 9.

[442] *See, e.g.*, 2017 MOPR Remand Order, 161 FERC ¶ 61,252 at P 41 (rejecting PJM's 2012 MOPR filing thereby re-instituting the 2013 MOPR rules which did not mitigate demand response, energy-efficiency or storage resources); 2013 MOPR Order, 143 FERC ¶ 61,090 at P 166 (applying the MOPR to gas-fired resources only).

[443] The fact that these resources participate in the capacity market reveals that they are capacity resources. If they are not capacity resources, then they should not participate in the capacity market and receive payments as capacity resources.

applicable default offer price floor if they do not qualify for a Competitive Exemption or Unit-Specific Exemption.

209. However, we grant SMECO's request for a limited exemption for existing demand-side resources that have paused participation in the capacity market due to Capacity Performance. We recognize that, because demand-side resources were not previously subject to the MOPR, these resources may have made the decision to lapse participation in the capacity market based on earlier Commission directives. Given this policy shift, we find that it is just and reasonable to grant a one-time exemption for existing demand-side resources that have lapsed participation in the capacity market. If such resources have previously cleared a capacity auction, we find they should be considered existing for the delivery year 2022/2023 capacity auction. We clarify that this is a one-time exemption. After the next BRA, demand-side resources seeking to re-enter the capacity market will be treated as new, consistent with treatment of repowered resources.

### 5. <u>Unit-Specific Exemption</u>

#### a. <u>PJM's Proposal</u>

210. PJM proposes to replace its existing unit-specific exception, which applies to new resources, with a similar but broader provision that would apply to both new and existing resources.[444] Specifically, PJM proposes that a market participant intending to submit a sell offer for a State-Subsidized Resource in any RPM auction may, at its election, submit a request for a unit-specific default offer price floor determination no later than one hundred twenty (120) days before the relevant RPM auction.[445]

#### b. <u>Intervenor Positions</u>

211. A number of intervenors generally support PJM's proposal to allow for a resource-specific exemption for both new and existing resources that justify offers below the default offer price floor.[446] The Illinois Attorney General argues that, to the extent the Commission allows PJM to set unit-specific offer price floors, it should require that the unit-specific data come exclusively from FERC Form 1 reports to impose consistency

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[444] PJM Initial Testimony at 39; *see also* PJM Answer at 2-3.

[445] *Id*. Attach. A, proposed Tariff, Att. DD, § 5.14(h)(iv)(B).

[446] *See, e.g.*, API Initial Testimony at 21-22; Brookfield Reply Testimony at 4; Clean Energy Advocates Initial Testimony at 15; IPP Coalition Initial Testimony at 6; LS Power Reply Testimony at 7; OCC Initial Testimony at 5; Vistra Initial Testimony at 16; Pennsylvania Commission Reply Testimony at 14-15.

among submissions and enable transparency. The Illinois Attorney General further argues that the Net ACR calculation for the unit-specific offer price floor should not be limited to projected PJM market revenues, as in the existing unit-specific review process, but should also include out-of-market revenues or state subsidies, to accurately determine the revenues still needed to cover costs and allow the unit to continue to operate as a capacity resource.[447]

212. Other intervenors oppose a unit-specific exemption.[448] Exelon argues that the unit-specific exemption process sets administrative prices based on the Market Monitor's assessment of the unit's costs, rather than competitive forces, and is thus opaque to outsiders, highly subjective, and needlessly complex.[449]

213. Finally, PSEG argues the unit-specific exemption process should be eliminated because it is too unwieldly and burdensome to accommodate review of the additional resources under an expanded MOPR.[450]

### c. **Commission Determination**

214. We direct PJM to maintain the Unit-Specific Exemption, expanded to cover existing and new State-Subsidized Resources of all resource types, to permit any resource that can justify an offer lower than the default offer price floor to submit such bids to PJM for review. This will operate as a unit-specific alternative to the default offer price floor, as discussed above, for both new and existing resources, and will be based on the resource's expected costs and revenues, subject to approval by the Market Monitor. PJM's criteria, parameters, and evaluation processes, moreover, will largely track the Unit-Specific Exemption methodology set forth in PJM's currently-effective Tariff. We direct PJM to submit Tariff language on compliance to implement this directive.

215. We disagree with the Illinois Attorney General that acceptable supporting data for a Unit-Specific Exemption should be limited to FERC Form 1 reports. Suppliers should use the best available data to support their Unit-Specific Exemptions, including non-public cost data of the type not published in FERC Form 1. For example, in some cases, FERC Form 1 filers submit only high-level, aggregated data, which would be insufficient to justify a capacity market offer.

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[447] Illinois Attorney General Initial Testimony at 12.

[448] Exelon Initial Testimony at 30-31; PSEG Initial Testimony at 14.

[449] Exelon Initial Testimony at 30-31.

[450] PSEG Initial Testimony at 14.

216. Finally, we reject Exelon's argument that PJM's evaluation criteria lacks sufficient transparency and that the Unit-Specific Exemption should therefore be eliminated altogether. Given that the Market Monitor is an independent evaluator, we do not see the need for additional transparency at this time. However, we direct PJM to provide more explicit information about the standards that will apply when conducting this review as a safeguard against arbitrary ad hoc determinations that market participants and the Commission may be unable to reliably predict or reconstruct.[451] We also dismiss, as speculative, PSEG's assertion that a Unit-Specific Exemption for existing resources will be unwieldly and burdensome. PJM's default offer price floor for each resource class will remain available should market participants find the Unit-Specific Exemption process burdensome.

### E. **Transition Mechanisms**

217. The June 2018 Order sought comment on "whether any [transition] mechanisms or other accommodations would be necessary . . . to facilitate the transition to [PJM's] new capacity construct."[452] PJM does not propose a transition mechanism for RCO or Extended RCO.[453]

218. A number of intervenors object to the implementation of an expanded MOPR prior to the time that a state-supported resource will be able to adopt new rules and/or legislation, and thereby meaningfully use RCO.[454] Several intervenors propose various

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[451] As indicated above, *see supra* note 36, the factors listed in proposed Tariff section 5.14(h)(iv)(B)(2) of PJM's initial filing in the paper hearing appear to present a reasonable objective basis for the analysis of new entrants.

[452] June 2018 Order, 163 FERC ¶ 61,236, at P 170.

[453] PJM Reply Testimony at 32.

[454] *See, e.g.*, ACORE Initial Testimony at 4; Clean Energy Industries Initial Testimony at 23-24; Clean Energy and Consumer Advocates Initial Testimony at 26; Clean Energy and Consumer Advocates Reply Testimony at 71; Joint Stakeholders Initial Testimony at 7; DC People's Counsel Initial Testimony at 15; FEU Initial Testimony at 20; Illinois Attorney General Initial Testimony at 18; Illinois Attorney General Reply Testimony at 15; Illinois Commission Initial Testimony at 6-7; New Jersey Board Initial Testimony at 17; NEI Initial Testimony at 7; Joint Consumer Advocates Reply Testimony at 22-25; Pennsylvania Commission Reply Testimony at 19; PJM Consumer Representatives Reply Testimony at 13; OPSI Initial Testimony at 5; DC Commission Initial Testimony at 9; PSEG August Answer at 3-4

transition mechanisms as a bridge to implementation of a resource-specific FRR Alternative or other market constructs.[455]

219. Because we decline to implement a resource-specific FRR Alternative, we dismiss as moot intervenors requests that a transition mechanism be adopted to facilitate the adoption a resource-specific FRR Alternative. We also decline to implement a transition mechanism for the expanded MOPR discussed herein and expect the next BRA to be conducted under the new rules to provide the necessary and appropriate price signals to capacity resources. On compliance, we direct PJM to provide an updated timetable for when it proposes to conduct the 2019 BRA, as well as the 2020 BRA, as necessary.

The Commission orders:

PJM is hereby directed to submit a compliance filing within 90 days of the date of this order, as discussed in the body of this order.

By the Commission. Commissioner Glick is dissenting with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.

[455] Direct Energy Initial Testimony at 9-10; NRG Initial Testimony at 42; Eastern Generation Initial Testimony at 2; FEU Initial Testimony at 20-21; Illinois Commission Reply Testimony at 29; PSEG Initial Testimony at 15-16.

Appendix 1

**<u>Intervenors in Docket No. EL18-178-000</u>**
**(With No Prior Party Status)**

Acciona Wind Energy USA LLC*
AES Corporation*
Allco Renewable Energy Limited*
Algonquin Energy Services Inc., et al.*
Allegheny Electric Cooperative, Inc.
American Coalition for Clean Coal Electricity*
American Forest & Paper Association*
Appalachian Region Independent Power Producers Association
Brookfield Energy Marketing LP
Carroll County Energy LLC
Cogentrix Energy Power Management, LLC
Connecticut Department of Energy and Environmental Protection
Connecticut Public Utilities Regulatory Authority
Consolidated Edison Energy, Inc.
Deepwater Wind, LLC
Delaware Municipal Electric Corporation
EDF Trading North America, LLC, EDF Energy Services, LLC
and EDP Renewables North America LLC*
Enel Companies*
Energy Capital Partners*
FirstEnergy Solutions Corp.
H-P Energy Resources LLC
Indicated New York Transmission Owners*
Indiana Utility Regulatory Commission*
Industrial Energy Consumers of Pennsylvania*
Lightstone Generation LLC*
Long Island Lighting Company d/b/a Power Supply Long Island
National Mining Association*
Michigan Attorney General*
Microgrid Resources Coalition*
Ohio Manufacturers' Association Energy Group*
Office of the Attorney General for the District of Columbia*
Olympus Power, LLC
Pennsylvania Coal Alliance
Pennsylvania Energy Consumer Alliance*
Potomac Economics, Ltd.*
Public Service Commission of the District of Columbia*
Public Service Commission of Kentucky

Rockland Electric Company
Sabin Center for Climate Change Law
Tenaska Inc.*

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* Motions to intervene out-of-time

Appendix 2

**Intervenors Submitting Testimony**

Advanced Energy Economy (AEE)
AES Corporation (AES)
Advanced Energy Buyers Group (Buyers Group)
Allco Renewable Energy Limited (Allco)
Allegheny Electric Cooperative, Inc. (Allegheny)
American Coalition for Clean Coal Electricity and National Mining
Association (ACCCE/NMA)
American Council on Renewable Energy (ACORE)
American Electric Power Service Corporation and Duke Energy
Corporation (AEP/Duke)
American Electric Power Service Corporation and FirstEnergy
Utilities Companies (AEP/FEU)
American Forest & Paper Association (AFPA)
American Municipal Power, Inc. (AMP)
with Public Power Association of New Jersey (AMP/PPANJ)
American Petroleum Institute (API)
American Public Power Association (APPA)
American Wind Energy Association, the Solar RTO Coalition, the
Mid-Atlantic Renewable Energy Coalition, and Solar Energy
Industries
Association (Clean Energy Industries)
Avangrid Renewables, LLC (Avangrid)
Borlick Energy Consultancy (Borlick)
Brookfield Energy Marketing LP (Brookfield)
Buckeye Power, Inc. (Buckeye)
Calpine Corporation (Calpine)
Carroll County, *et al.* (IPP Coalition)
Citizens Utility Board, Exelon Corporation, Natural Resources Defense
Council, Nuclear Energy Institute, Office of the Peoples Counsel
For the District of Columbia, PSEG Energy Resources & Trade
LLC, Sierra Club, and Talen Energy Corporation
(Joint Stakeholders)
Cogentrix Energy Power Management, LLC (Cogentrix)
Consumer Advocates, NGOs, and Industry Stakeholders
Direct Energy Business Marketing, LLC, *et al*. (Direct Energy)
Direct Energy Business Marketing, LLC, *et al.* and NextEra Resources, LLC
(Joint Parties)
District of Columbia Attorney General (DC Attorney General)
District of Columbia People’s Counsel (DC People’s Counsel)

District of Columbia Public Service Commission (DC Commission)
Dominion Energy Services, Inc. (Dominion)
East Kentucky Power Cooperative (EKPG)
Eastern Generation, LLC (Eastern Generation)
Electric Power Supply Association (EPSA)
Electricity Consumers Resource Council (ELCON)
Energy Capital Partners IV, LLC (ECP)
Exelon Corporation (Exelon)
FirstEnergy Solutions Corp. (FES)
FirstEnergy Utilities Companies (FEU)
Harvard Electricity Law Initiative (Harvard)
Illinois Attorney General (Illinois Attorney General)
Illinois Citizens Utility Board, West Virginia Consumer Advocate Division, Delaware Division of the Public Advocate, Maryland Office of the People's Council, and Office of the People's Counsel for the District Of Columbia (Joint Consumer Advocates)
Illinois Commerce Commission (Illinois Commission)
Illinois Municipal Electric Agency (IMEA)
Indiana Utility Regulatory Commission (Indiana Commission)
Institute for Policy Integrity (Policy Integrity)
Kentucky Public Service Commission (Kentucky Commission)
Lightstone Generation LLC, Tenaska, Inc., Carrol County Energy LLC,
And Energy Capital Partners IV, LLC (Lightstone, *et al*.)
LS Power Associates, L.P. (LS Power)
Maryland Public Service Commission (Maryland Commission)
Microgrid Resources Coalition (Microgrid)
Michigan Public Service Commission, Michigan Agency for Energy,
and Michigan Attorney General (Michigan Parties)
Microsoft Corporation (Microsoft)
Monitoring Analytics, LLC, acting as PJM Independent Market Monitor
(Market Monitor)
NRG Power Marketing LLC (NRG)
National Rural Electric Cooperative Association (NRECA)
Natural Resources Defense Council, Sierra Club, Sustainable FERC Project, and
the Office of the People's Counsel for the District of Columbia (Clean Energy
and Consumer Advocates)
Natural Resources Defense Council, Sierra Club, Sustainable FERC
Project (Clean Energy Advocates)
New Jersey Board of Public Utilities (New Jersey Board)
Northern Virginia Electric Cooperative, Inc. (NOVEC)
Nuclear Energy Institute (NEI)
Office of the Ohio Consumers' Counsel (OCC)
Old Dominion Electric Cooperative (ODEC)

Organization of PJM States (OPSI)
Pennsylvania Public Utility Commission (Pennsylvania Commission)
PJM Industrial Customer Coalition, Industrial Energy Consumers of America, Illinois Industrial Energy Consumers, the Pennsylvania Energy Consumer Alliance, the Electricity Consumers Resource Council, the Industrial Energy Consumers of Pennsylvania, and Ohio Manufacturers' Association Energy Group (PJM Consumer Representatives)
PJM Interconnection, L.L.C. (PJM)
PJM Power Providers Group (P3)
PSEG Companies (PSEG)
Public Utilities Commission of Ohio (Ohio Commission)
Resources for the Future
Retail Energy Supply Association (RESA)
Rockland Capital, LLC (Rockland)
Sabin Center for Climate Change Law at NYU (Sabin Center)
Shell Energy North America (US), L.P. (Shell)
Southern Maryland Electric Cooperative (SMECO)
Starwood Energy Group Global, L.L.C. (Starwood)
Talen PJM Companies (Talen)
Tenaska Inc. (Tenaska)
Tesla, Inc. (Tesla)
Union of Concerned Scientists (UCS)
Virginia State Corporation Commission (Virginia SCC)
Vistra Energy Corp. and Dynegy Marketing and Trade, LLC (Vistra)
West Virginia Public Service Commission (West Virginia Commission)

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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|---|---|---|
| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC | Docket Nos. | EL16-49-000 |
| | | EL18-178-00 |
| | | (Consolidated) |

v.

PJM Interconnection, L.L.C.

PJM Interconnection, L.L.C.

(Issued December 19, 2019)

GLICK, Commissioner, *dissenting*:

1. From the beginning, this proceeding has been about two things: Dramatically increasing the price of capacity in PJM and slowing the region's transition to a clean energy future. Today's order will do just that. I strongly dissent from today's order as I believe it is illegal, illogical, and truly bad public policy.

2. Today's order has three major elements. First, it establishes a sweeping definition of subsidy that will potentially subject much, if not most, of the PJM capacity market to a minimum offer price rule (MOPR). Second, it creates a number of exemptions to the MOPR that will have the principal effect of entrenching the current resource mix by excluding several classes of existing resources from mitigation. Third, it unceremoniously discards the so-called "resource-specific FRR Alternative,"[1] which had

[1] FRR stands for Fixed Resource Requirement.

been the crux of the Commission's proposal in the June 2018 Order that sent us down the current path.[2]

3. The order amounts to a multi-billion-dollar-per-year rate hike for PJM customers, which will grow with each passing year. It will increase both the capacity price in the Base Residual Auction as well as the already extensive quantity of redundant capacity in PJM. It is a bailout, plain and simple.

4. The order will also ossify the current resource mix. It is carefully calibrated to give existing resources a leg up over new entrants and to force states to bear enormous costs for exercising the authority Congress reserved to the states when it enacted the Federal Power Act (FPA). States throughout the PJM region are increasingly addressing the externalities of electricity generation, including the biggest externality of them all, anthropogenic climate change. We all know what is going on here: The costs imposed by today's order and the ubiquitous preferences given to existing resources are a transparent attempt to handicap those state actions and slow—or maybe even stop—the transition to a clean energy future.

5. But poor policy is only part of the problem. The Commission has bungled the proceeding from the beginning. The June 2018 Order upended the entire market by finding the PJM Reliability Pricing Model (*i.e.*, the capacity market) unjust and unreasonable based on nothing more than theory and a thin record. It was, as former Commissioner LaFleur aptly described it, "a troubling act of regulatory hubris."[3] The Commission then sent PJM back to the drawing board with only vague guidance and nowhere near the time needed to develop a proper solution. Under those circumstances, it should have been no surprise that the Commission found itself paralyzed and unable to act for more than a year after receiving PJM's compliance filing. And while that result may not have been surprising, it was deeply unfair to PJM, its stakeholders, and the region's 65 million customers.

6. Today's order is more of the same. The Commission provides almost no guidance on how its sweeping definition of subsidy will work in practice or how it will interact with the complexities posed by a capacity market spanning 13 very different states and the District of Columbia. In addition, the Commission's abandonment of the resource-specific FRR Alternative—the one fig leaf that the June 2018 Order extended to the state

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[2] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 (2018) (June 2018 Order).

[3] *Id.* (LaFleur, Comm'r, dissenting at 5) ("The majority is proceeding to overhaul the PJM capacity market based on a thinly sketched concept, a troubling act of regulatory hubris that could ultimately hasten, rather than halt, the re-regulation of the PJM market.").

authority—will likely culminate in a system of administrative pricing that bears all the inefficiencies of cost-of-service regulation, without any of the benefits. And despite yet another dramatic change in direction, the Commission provides PJM only 90 days to work out a laundry list of changes that go to the very heart of its basic market design. And so, as we embark on yet another round of poorly conceived policy edicts coupled with too little time to do justice to the details, it seems that the Commission has learned none of the lessons from the last year-and-a-half of this saga. It is not hard to understand why states across the region are losing confidence in the Commission's ability to ensure resource adequacy at just and reasonable rates.

## I. Today's Order Unlawfully Targets a Matter under State Jurisdiction

7. The FPA is clear. The states, not the Commission, are the entities responsible for shaping the generation mix. Although the FPA vests the Commission with jurisdiction over wholesale sales of electricity as well as practices affecting those wholesale sales,[4] Congress expressly precluded the Commission from regulating "facilities used for the generation of electric energy."[5] Instead, Congress gave the states exclusive jurisdiction to regulate generation facilitates.[6]

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[4] Specifically, the FPA applies to "any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission" and "any rule, regulation, practice, or contract affecting such rate, charge, or classification." 16 U.S.C. § 824e(a) (2018); *see also id.* § 824d(a) (similar).

[5] *See id.* § 824(b)(1) (2018); *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1292 (2016) (describing the jurisdictional divide set forth in the FPA); *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760, 767 (2016) (*EPSA*) (explaining that "the [FPA] also limits FERC's regulatory reach, and thereby maintains a zone of exclusive state jurisdiction"); *Panhandle E. Pipe Line Co. v. Pub. Serv. Comm'n of Ind.*, 332 U.S. 507, 517–18 (1947) (recognizing that the analogous provisions of the NGA were "drawn with meticulous regard for the continued exercise of state power"). Although these cases deal with the question of preemption, which is, of course, different from the question of whether a rate is just and reasonable under the FPA, the Supreme Court's discussion of the respective roles of the Commission and the states remains instructive when it comes to evaluating how the application of a MOPR squares with the Commission's role under the FPA.

[6] 16 U.S.C. § 824(b)(1); *Hughes*, 136 S. Ct. at 1292; *see also Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 205 (1983) (recognizing that issues including the "[n]eed for new power facilities, their economic feasibility, and rates and services, are areas that have been characteristically governed by

8. But while those jurisdictional lines are clearly drawn, the spheres of jurisdiction themselves are not "hermetically sealed."[7] One sovereign's exercise of its authority will inevitably affect matters subject to the other sovereign's exclusive jurisdiction.[8] For example, any state regulation that increases or decreases the number of generation facilities will, through the law of supply and demand, inevitably affect wholesale rates.[9] But the existence of such cross-jurisdictional effects is not necessarily a "problem" for the purposes of the FPA. Rather, those cross-jurisdictional effects are the product of the "congressionally designed interplay between state and federal regulation"[10] and the natural result of a system in which regulatory authority is divided between federal and

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the States").

[7] *EPSA*, 136 S. Ct. at 776; *see Oneok, Inc. v. Learjet, Inc.*, 135 S. Ct. 1591, 1601 (2015) (explaining that the natural gas sector does not adhere to a "Platonic ideal" of the "clear division between areas of state and federal authority" that undergirds both the FPA and the Natural Gas Act).

[8] *See EPSA*, 136 S. Ct. at 776; *Oneok*, 135 S. Ct. at 1601; *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 57 (2d Cir. 2018) (explaining that the Commission "uses auctions to set wholesale prices and to promote efficiency with the background assumption that the FPA establishes a dual regulatory system between the states and federal government and that the states engage in public policies that affect the wholesale markets").

[9] *Zibelman*, 906 F.3d at 57 (explaining how a state's regulation of generation facilities can have an "incidental effect" on the wholesale rate through the basic principles of supply and demand); *id.* at 53 ("It would be 'strange indeed' to hold that Congress intended to allow the states to regulate production, but only if doing so did not affect interstate rates." (quoting *Nw. Cent. Pipeline Corp. v. State Corp. Comm'n of Kansas*, 489 U.S. 493, 512-13 (1989) (*Northwest Central*))); *Elec. Power Supply Ass'n v. Star*, 904 F.3d 518, 524 (7th Cir. 2018) (explaining that the subsidy at issue in that proceeding "can influence the auction price only indirectly, by keeping active a generation facility that otherwise might close . . . . A larger supply of electricity means a lower market-clearing price, holding demand constant. But because states retain authority over power generation, a state policy that affects price only by increasing the quantity of power available for sale is not preempted by federal law.").

[10] *Hughes*, 136 S. Ct. at 1300 (Sotomayor, J., concurring) (quoting *Northwest Central*, 489 U.S. at 518); *id.* ("recogniz[ing] the importance of protecting the States' ability to contribute, within their regulatory domain, to the Federal Power Act's goal of ensuring a sustainable supply of efficient and price-effective energy").

state government.[11] Maintaining that interplay and permitting each sovereign to carry out its designated role is essential to the dual-federalist structure that Congress made the foundation of FPA.

9. In recent years, the Supreme Court has repeatedly admonished both the Commission and the states that the FPA does not permit actions that "aim at" or "target" the other sovereign's exclusive jurisdiction.[12] Beginning with *Oneok*, the Court has underscored that its "precedents emphasize the importance of considering the *target* at which the state law *aims*."[13] The Court has subsequently explained how that general principle plays out in practice when analyzing the limits on both federal and state authority. In *EPSA*, the Court held that the Commission can regulate a practice affecting wholesale rates, provided that the practice "directly" affected wholesale rates and that the Commission does not regulate or target a matter reserved for exclusive state jurisdiction.[14] And in *Hughes*, the Court again emphasized that a state may not aim at or target the Commission's jurisdiction, which means that a state cannot not "tether" its policy design to participation in the Commission-jurisdictional wholesale market.[15] In the intervening few years, the lower federal courts have carefully followed the Court's strict prohibition on one sovereign regulating in a manner that aims at or targets the other jurisdiction.[16]

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[11] *Cf. Star*, 904 F.3d at 523 *(*"For decades the Supreme Court has attempted to confine both the Commission and the states to their proper roles, while acknowledging that each use of authorized power necessarily affects tasks that have been assigned elsewhere.").

[12] *Hughes*, 136 S. Ct. at 1298 (relying on *Oneok*, 135 S. Ct. at 1599, for the proposition that a state may regulate within its sphere of jurisdiction even if its actions "incidentally affect areas within FERC's domain" but that a state may not target or intrude on FERC's exclusive jurisdiction); *EPSA*, 136 S. Ct. at 776 (emphasizing the importance of "'the *target* at which [a] law *aims*'") (quoting *Oneok*, 135 S. Ct. at 1600); *Oneok*, 135 S. Ct. at 1600 (recognizing "the distinction between 'measures *aimed directly at* interstate purchasers and wholesales for resale, and those aimed at' subjects left to the States to regulate") quoting *N. Nat. Gas Co. v. State Corp. Comm'n of Kan.*, 372 U.S. 84, 94 (1963) (*Northern Natural*))).

[13] *Oneok*, 135 S. Ct. at 1600 (discussing *Northern Natural*, 372 U.S. at 94, and *Northwest Central*, 489 U.S. at 513-14).

[14] *EPSA*, 136 S. Ct. at 775-77; *id.* at 776.

[15] *Hughes*, 136 S. Ct. at 1298, 1299.

[16] *See, e.g.*, *Zibelman*, 906 F.3d at 50-51, 53; *Star*, 904 F.3d at 523-24; *Allco Fin.*

10. The Commission's use of the MOPR in this proceeding violates that principle. By its own terms, the Commission's "target" or "aim" is the PJM states' exercise of their exclusive jurisdiction to regulate generation facilities. At every turn, the Commission has focused on the purported problems caused by the states' decisions to promote particular types of generation resources. For example, the Commission began its determination section in the June 2018 Order by noting that "[t]he records [before it] demonstrate that states have provided or required meaningful out-of-market support to resources in the current PJM capacity market, and that such support is projected to increase substantially in the future."[17] The Commission noted that state efforts to shape the resource mix are increasing and are projected to increase at an even faster rate going forward.[18] The Commission explained that these state actions created "significant uncertainty" and left resources unable to "predict whether their capital will be competing against" subsidized or unsubsidized units.[19] And the Commission ultimately found that PJM's tariff was unjust and unreasonable because of the potential for subsidized resources to participate in and affect the capacity market clearing price[20]—in other words, the natural consequence of any state regulation of generation facilities.[21]

11. Today's order is even more direct in its attack on state resource decisionmaking. It begins by reiterating the finding that an expanded MOPR is necessary in light of increasing state action to shape the generation mix, "especially out-of-market state support for renewable and nuclear resources."[22] It then asserts that PJM's existing, limited MOPR is unjust and unreasonable because it does not specifically prevent state actions from keeping existing resources operational or facilitating the entry of new

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*Ltd. v. Klee*, 861 F.3d 82, 98 (2d Cir. 2017).

[17] June 2018 Order, 163 FERC ¶ 61,236 at P 149.

[18] *Id.* PP 151-152. Similarly, in explaining its decision to extend the MOPR to existing resources, the Commission relied, not on evidence about how state action *might* affect clearing prices, but entirely on the fact that state actions were proliferating and that, as a result, resources that it believes ought to consider retiring might not do so. *Id.* P 153.

[19] *Id.* P 150.

[20] *Id.* P 156.

[21] *See supra* note 9 and accompanying text.

[22] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,239, at P 37 (2019) (Order).

resources through the capacity market.[23] To address those concerns, the Commission adopts a sweeping MOPR that could potentially apply to any conceivable state effort to shape the generation mix. And, tellingly, it rejects the suggestion that the MOPR should apply only to those state policies that actually affect the wholesale rate.[24]

12. In fact, the Commission comes right out and acknowledges that its goal is to "send price signals on which investors and consumers can rely to guide the orderly entry and exit of economically efficient capacity resources."[25] That means the Commission is attempting to establish a set of price signals for determining resource entry and exit that will supersede state resource decisionmaking and better reflect the Commission's policy priorities. It is hard to imagine how the Commission could much more directly target or aim at state authority over resource decisionmaking. Although the Commission insists that it is not impinging on state authority, it concedes elsewhere in today's order that the MOPR disregards and nullifies the policies to which it applies.[26] And, as if that were not enough, the Commission compounds its intrusion on state authority by substituting its own policy preferences—a peculiar mix of reverence for "competition" and reliance on administrative pricing—to entrench the existing resource mix and trample states' concerns about the environmental externalities of electricity generation.

13. All told, this simply is not a proceeding where "the Commission's justifications for regulating . . . are all about, and only about, improving the wholesale market."[27]

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[23] *Id.* P 37.

[24] Order, 169 FERC ¶ 61,239 at PP 56, 65-75. Imposing a requirement that there be an actual price impact would have brought today's order far closer to the facts in *EPSA*. *See* 136 S. Ct. at 771-72 (explaining that the demand response rule was structured to compensate only those resources whose participation would "result in actual savings to wholesale purchasers"); *id.* at 776 (noting the entities "footing the bill [for demand response participation] are the same wholesale purchasers that have benefited from the lower wholesale price demand response participation has produced (italics omitted)). Such a requirement would not be especially unusual. Markets throughout the country apply conduct and impact thresholds for mitigation, including in energy, ancillary services, and capacity markets.

[25] Order, 169 FERC ¶ 61,239 at P 40.

[26] The Commission justifies its refusal to extend the MOPR to federal subsidies because to do so would "disregard or nullify the effect of federal legislation." Order, 169 FERC ¶ 61,239 at P 87. But that can only mean that the Commission is fully aware that this is what it is doing to state policies, notwithstanding its repeated assurances that it respects state jurisdiction over generation facilities. *See, e.g., id.* n.345.

[27] *EPSA*, 136 S. Ct. at 776 (citing *Oneok*, 135 S. Ct. at 1599).

Unlike the rule upheld in *EPSA*, where the matters subject to state jurisdiction "figure[d] no more in the Rule's goals than in the mechanism through which the Rule operates," the state actions are front and center in the Commission's justification for acting.[28] To be sure, the Commission doffs its hat to "price suppression" throughout the order. But repeating the phrase "price suppression" does not change the fact that the Commission's stated concern in both the June 2018 Order and today's order is the states' exercise of their authority to shape the generation mix or that the Commission's stated goal for the Replacement Rate is to displace the effects of state resource decisionmaking. Similarly, the Commission's observation that it is not literally precluding states from building new resources is beside the point. That's the equivalent of saying that a grounded kid is not being punished because he can still play in his room—it deliberately mischaracterizes both the intent and the effect of the action in question.

14. The MOPR's recent evolution illustrates the extent of the shift in the Commission's focus from the wholesale market to state resource decisionmaking. The MOPR was originally used to mitigate buyer-side market power within the wholesale market[29]—a concern at the heart of the Commission's responsibility to ensure that wholesale rates are just and unreasonable.[30] And for much of the MOPR's history, that is what it did. Even when the Commission eliminated the categorical exemption for resources developed pursuant to state public policy, the Commission limited the MOPR's application only to natural gas-fired resources—*i.e.*, those that would most likely be used as part of an effort to decrease capacity market prices.[31]

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[28] *Id.*

[29] Specifically, those early MOPRs were designed to ensure that net buyers of capacity were not able to deploy market power to drive down the capacity market price. *See generally* Richard B. Miller, Neil H. Butterklee & Margaret Comes, *"Buyer-Side" Mitigation in Organized Capacity Markets: Time for a Change?*, 33 Energy L.J. 459 (2012) (discussing the history buyer-side mitigation at the Commission).

[30] *Cf., e.g., Pub. Util. Dist. No. 1 of Snohomish Cty. v. Dynegy Power Mktg., Inc.*, 384 F.3d 756, 760 (9th Cir. 2004) (explaining that the absence of market power could provide a strong indicator that rates are just and reasonable); *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1004 (D.C. Cir. 1990) ( "In a competitive market, where neither buyer nor seller has significant market power, it is rational to assume that the terms of their voluntary exchange are reasonable, and specifically to infer that the price is close to marginal cost, such that the seller makes only a normal return on its investment.").

[31] *See New Jersey Board of Public Utilities v. FERC*, 744 F.3d 74, 106-07 (3d Cir. 2014) (*NJBPU*).

15. It was only last year that state resource decisionmaking became the MOPR's primary target. For the first time, the Commission asserted that the MOPR could be used to block state resource decisionmaking writ large rather than only those state policies that could rationally be aimed at exercising market power in order to depress prices. The Commission has never been able to justify its change of target. It first claimed that this transformation of the MOPR was necessary to ensure "investor confidence" and the ability of unsubsidized resources to compete against resources receiving state support.[32] A few months later, at the outset of this proceeding, the Commission abandoned "investor confidence" altogether and asserted the need to mitigate state policies in order to protect the "integrity" of the capacity market—another concept that it did not bother to explain.[33] And today, the Commission adds yet another new twist: That state subsidies "reject the premise the capacity markets."[34] But, as with investor confidence and market integrity, it is hard to know exactly what that premise is.

16. If there is one thing that those inscrutable principles share, it is their inability to conceal, much less justify, the fundamental shift in the Commission's focus. Whereas the MOPR once targeted efforts to exercise market power on behalf of load and directly reduce the capacity market price, it now targets state resource decisionmaking, and particularly state efforts to address the externalities of electricity generation. That change is one of kind and not just degree. And because that shift in focus is wholly impermissible, the Commission has little choice but to hide behind excuses such as investor confidence, market integrity, and the premise of capacity markets—principles that, as applied here, are so abstract as to be meaningless. The Commission's effort to recast the MOPR as always having been about price suppression at some level of generality[35] obfuscates that point and badly mischaracterizes the recent shift in the MOPR's focus.[36]

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[32] *ISO New England Inc.*, 162 FERC ¶ 61,205, at P 21 (2018).

[33] June 2018 Order, 163 FERC ¶ 61,236 at PP 150, 156, 161.

[34] Order, 169 FERC ¶ 61,239 at P 17.

[35] *Id.* at P 136. Saying that the MOPR has always been about price suppression is the equivalent of saying that speed limits have always been about keeping people from getting to their destination too quickly. There is a sense in which that is true, but it kind of misses the real goal.

[36] The majority points to the U.S. Court of Appeals for the Third Circuit's decision in *NJBPU*, 744 F.3d 74, to argue that at least one court has already blessed extending the MOPR to state-sponsored resources. *See* Order, 169 FERC ¶ 61,239 at P 7. But *NJBPU* differs in important respects. First, at that time, the MOPR was still limited to natural gas-fired generators—the resources that could feasibly and rationally be built for the

17. The consequences of the Commission's theory of jurisdiction reinforce the extent to which it intrudes on state authority. Taken seriously, today's order permits the Commission to zero out *any* state effort to address the externalities associated with sales of electricity. That includes the Regional Greenhouse Gas Initiative (RGGI) a market-based program to reduce greenhouse gas emissions. It would also target any future carbon tax, cap-and-trade program, or clean energy standard—all of which would inevitably affect the wholesale market clearing price. That result is untenable. A theory of jurisdiction that allows the Commission to block any state effort to economically regulate the externalities associated with electricity generation is not a reasonable interpretation of the FPA's balance between federal and state jurisdiction.[37]

## II. Today's Order Does Not Establish a Just and Reasonable Rate

### A. Under the Commission's Definition, Almost All Capacity in PJM Is a Subsidized Resource

18. Taking today's order at face value, much—and perhaps the vast majority—of the capacity in PJM will potentially be subject to the MOPR. That is because the Commission's broad definition of subsidy encompasses almost any aspect of state resource decisionmaking. Although the Commission's various exemptions and carve-outs will blunt some of the resulting impact, the definition of subsidy will nevertheless apply to a vast swathe of resources and create enormous uncertainty, even for those resources that eventually manage to escape mitigation. Moreover, as explained in the following sections,[38] resources that do not escape mitigation will no longer be competing based on their offers to supply capacity, but rather based on a complex system of administrative pricing whose entire purpose is to increase capacity prices.

19. It all starts with the Commission's definition of subsidy. A State Subsidy is

> A direct or indirect payment, concession, rebate, subsidy, non-bypassable consumer charge, or other financial benefit that is (1) a

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purpose of depressing capacity market prices, *see* 744 F.3d at 106. In addition, as the court explained, the Commission's "enumerated reasons for approving the elimination of the state-mandated exception relate directly to the wholesale price for capacity." *Id.* at 98. As noted, however, the Commission's recent application of the MOPR, including in this proceeding, focuses much more broadly on the supposed problems with state subsidies.

[37] *Cf. EPSA*, 136 S. Ct. at 774 (explaining that the FPA cannot be interpreted in a manner that allows it to "assum[e] near infinite breadth").

[38] *Supra* Section II.C.

> result of any action, mandated process, or sponsored process of a state government, a political subdivision or agency of a state, or an electric cooperative formed pursuant to state law, and that (2) is derived from or connected to the procurement of (a) electricity or electric generation capacity sold at wholesale in interstate commerce, or (b) an attribute of the generation process for electricity or electric generation capacity sold at wholesale in interstate commerce, or (3) will support the construction, development, or operation of a new or existing capacity resource, or (4) could have the effect of allowing a resource to clear in any PJM capacity auction.[39]

20. Let's begin with the biggest categories of capacity resources newly subject to the MOPR: Resources relied upon by vertically integrated utilities and public power (including municipal utilities and electric cooperatives). Vertically integrated utilities and public power represent nearly a fifth of the capacity in PJM.[40] All these entities recover their costs through non-bypassable consumer charges that are the result of "a process of a state government, a political subdivision or agency of a state, or an electric cooperative formed pursuant to state law."[41]

21. In addition, as I noted in my dissent from the underlying order, the PJM states provide dozens of different subsidies and benefits tied to particular generation resources or generation types.[42] Those ubiquitous subsidies expose a vast number of resources to potential mitigation. For example, Kentucky exempts companies that use coal to generate electricity (its principal source of electricity[43]) from paying property taxes,[44] while other states provide tax breaks for the fuel types that play an important role in their

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[39] Order, 169 FERC ¶ 61,239 at P 65.

[40] Monitoring Analytics, *2019 State of the Market Report for PJM: January through September* at Tbl. 5-5, *available at* https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2019/2019q3-som-pjm-sec5.pdf.

[41] Order, 169 FERC ¶ 61,239 at P 65.

[42] June 2018 Order, 163 FERC ¶ 61,236 (Glick, Comm'r, dissenting at 8).

[43] Clean Energy Advocates Protect, Docket No. ER18-1314-000 (2018) App. E (Doug Koplow, *Energy Subsidies within PJM: A Review of Key Issues in Light of Capacity Repricing and MOPR-Ex Proposals*).

[44] *Id.*

local economies.[45] All of those programs qualify as subsidies as they are "derived from or connected to the procurement" of electricity or capacity or "could have the effect of allowing a resource to clear in any PJM capacity auction."[46]

22. But those are just some of the obvious State Subsidies. The Commission's definition will also ensnare a variety of state actions that have little in common with any ordinary use of the word "subsidy." For example, any resource that benefits from a state carbon tax, cap-and-trade program, or clean energy standard would be subject to mitigation because, as a result of state action, it receives financial benefit (whether direct or indirect) that is connected to electricity generation or an attribute of the generating process. Putting aside the affront to state jurisdiction, consider the mess that would create. Every relatively clean resource would "benefit" from a carbon tax or cap-and-trade system by virtue of becoming more cost-competitive. That benefit would not be limited to zero-emissions resources. Instead, taking the Commission's definition at face value, every relatively efficient natural gas-fired resource—including existing ones—would be subject to mitigation because they are relatively less carbon-intensive.

23. That is not an abstract concern. A literal application of the subsidy definition includes RGGI because it provides a financial benefit as a result of state action or state-mandated process. This means that every relatively low-emitting generator in Delaware and Maryland[47] will be subject to mitigation. And the same fate may shortly befall relatively clean generators in Virginia, Pennsylvania, and New Jersey—all of which are considering or have announced their intention to join RGGI in the near future.

24. In addition, the PJM states have a host of idiosyncratic regulatory regimes that may well trigger the MOPR. Case-in-point: The New Jersey Basic Generation Service Electricity Supply Auction (BGS auction). Through this state-mandated process, electric distribution companies solicit offers from resources to serve their load. The plain language of the Commission's definition of subsidy would treat any resource that serves load through the BGS auction as subsidized and, therefore, subject to the MOPR. That means that PJM and its Market Monitor will need to look behind the results of every BGS auction to determine which resources are receiving a benefit from this state process, which covers nearly 8,000 MW of load.[48] That could easily mean that the majority of

[45] *Id.*

[46] Order, 169 FERC ¶ 61,239 at P 65.

[47] Both of which are RGGI members. *The Regional Greenhouse Gas Initiative*, https://www.rggi.org/rggi-inc/contact (last visited Dec. 19, 2019) (listing RGGI member states).

[48] This is the total peak load from the tranches in the 2019 BGS auction. *The 2019 BGS Auctions*, http://www.bgs-auction.com/documents/ 2019_BGS_Auction_Results.pdf

resources that serve load in New Jersey will now be subject to mitigation. As this example illustrates, even state processes that are open, fair, transparent, and fuel-neutral may be treated as state subsidies, irrespective of the underlying state goals.

25. Perhaps the Commission will find a way to wiggle out from under its own definition of subsidy in ruling on PJM's compliance filing or over the course of what will no doubt be years of section 205 filings, section 206 complaints, and requests for declaratory orders addressing the definition of subsidy. But even under the best case scenario, where the Commission provides PJM and its stakeholders with quick and well-reasoned guidance on the meaning of "State Subsidy" (and, based on the Commission's performance to date in this proceeding, I would not get my hopes up), it will likely be years before we have a concrete understanding of how the subsidy definition works in practice or resources know for sure whether they will be subject to mitigation.

### B. The Replacement Rate Is Arbitrary and Capricious

26. Although the subsidy definition is broad, it nevertheless contains a number of arbitrary and capricious distinctions exemptions, and classifications. My point is not that the Commission should further expand the MOPR or apply it more stringently. As should by now be clear, I would altogether get out of the business of mitigating public policies. My point here is that the Commission's arbitrary application of the MOPR only underscores the extent to which it is poor public policy and not the product of reasoned decisionmaking.

#### 1. The Commission's Exclusion of Federal Subsidies Is Arbitrary and Capricious

27. No single determination in today's order is more arbitrary than the Commission's exclusion of all federal subsidies. Federal subsidies have pervaded the energy sector for more than a century, beginning even before the FPA declared that the "business of transmitting and selling electric energy . . . is affected with a public interest."[49] Since 1916, federal taxpayers have supported domestic exploration, drilling, and production activities for our nation's fossil fuel industry.[50] And since 1950, the federal government has provided roughly a trillion dollars in energy subsidies, of which 65 percent has gone

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(last visited Dec. 19, 2019).

[49] 16 U.S.C. § 824 (2018).

[50] *See* Molly Sherlock, Cong. Research Serv., *Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures* 2-3 (May 2011), *available at* https://fas.org/sgp/crs/misc/R41227.pdf (Energy Tax Policy).

to fossil fuel technologies.[51] These policies have "artificially" reduced the price of natural gas, oil, and coal, which in turn has allowed resources that burn these fuels—including many of the so-called "competitive" resources that stand to benefit from today's order—to submit "uncompetitive" bids into PJM's markets for capacity, energy, and ancillary services. By lowering the marginal cost of fossil fuel-fired units, government policies have allowed these units to operate more frequently and have encouraged the development of more of these units than might otherwise have been built.

28. Federal subsidies remain pervasive in PJM. The federal tax credit for nonconventional natural gas,[52] contributed to the spike in new natural gas-fired power plants between 2000 and 2005,[53] by decreasing the cost of operating those plants. Similarly, subsidies such as the percentage depletion allowance and the ability to expense intangible drilling costs have shaved billions of dollars off the cost of extracting coal and natural gas—two of the principal sources of electricity in PJM.[54] In addition, the domestic nuclear power industry would not exist without the Price-Anderson Act, which

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[51] *See* Nancy Pfund and Ben Healey, DBL Investors, *What Would Jefferson Do? The Historical Role of Federal Subsidies in Shaping America's Energy Future*, (Sept. 2011), *available at* http://www.dblpartners.vc/wp-content/uploads/2012/09/What-Would-Jefferson-Do-2.4.pdf; *New analysis: Wind energy less than 3 percent of all federal incentives*, Into the Wind: The AWEA Blog (July 19, 2016), https://www.aweablog.org/14419-2/ (citing, among other things, Molly F. Sherlock and Jeffrey M. Stupak, *Energy Tax Incentives: Measuring Value Across Different Types of Energy Resources*, Cong. Research Serv. (Mar. 19, 2015), *available at* https://fas.org/sgp/crs/misc/R41953.pdf; The Joint Committee on Taxation, *Publications on Tax Expenditures*, https://www.jct.gov/publications.html?func=select&id=5 (last visited June 29, 2018)) (extending the DBL analysis through 2016).

[52] Energy Tax Policy at 2 n.3. That credit has lapsed. *Id.* at 18.

[53] *Natural gas generators make up the largest share of overall U.S. generation capacity*, Energy Info. Admin. (Dec. 18, 2017), https://www.eia.gov/todayinenergy/detail.php?id=34172.

[54] The Joint Committee on Taxation, *Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022* at 21-22 (2018); Monitoring Analytics, *Analysis of the 2021/2022 RPM Base Residual Auction: Revised* 95 (2018), *available at* https://www.monitoringanalytics.com/ reports/Reports/2018/ IMM_Analysis_ of_the_20212022_RPM_BRA_Revised _20180824.pdf (reporting that coal, natural gas, and nuclear collectively make up more than three-quarters of the generation mix in PJM); *see generally* Molly Sherlock, Cong. Research Serv., *Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures* 2-6 (May 2011) (discussing the history of energy tax policy in the United States).

imposes indemnity limits for nuclear power generators, enabling them to secure financing and insurance at rates far below what would reflect their true cost.[55] Federal subsidies have also promoted the growth of renewable resources through, for example, the production tax credit (largely used by wind resources)[56] and the investment tax credit (largely used by solar resources).[57] These and other federal government interventions have had a far greater "suppressive" impact on the markets than the "state subsidies" targeted by today's order, especially when you consider that these resources make up the vast majority of the cleared capacity in PJM.[58]

29. The Commission, however, excludes all federal subsidies from the MOPR on the theory that it lacks the authority to "disregard or nullify the effect of federal legislation."[59] That justification is contradictory at best.[60] It is, of course, true that the FPA does not give the Commission the authority to undo other federal legislation. But the Commission's defense of the MOPR when applied to state policies, is that the MOPR neither disregards nor nullifies those policies, but instead addresses only the effects that those policies have on the PJM market.[61]

30. If, for the sake of argument, we accept the Commission's characterization of the MOPR's impact on state policies, then its justification for exempting federal subsidies from the MOPR immediately falls apart. Under that interpretation the MOPR does not actually disregard or nullify federal policy, but rather addresses only the effects of state

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[55] 42 U.S.C. § 2210(c).

[56] U.S. Department of Energy, 2018 Wind Technologies Market Report. Page 70. (accessed Dec 18. 2019) http://eta-publications.lbl.gov/sites/default/files/wtmr_final_for_posting_8-9-19.pdf.

[57] Solar Energy Industries Assoc., *History of the 30% Solar Investment Tax Credit* 3-4 (2012) https://www.seia.org/sites/default/files/resources/History%20of%20ITC%20Slides.pdf.

[58] Monitoring Analytics, *Analysis of the 2021/2022 RPM Base Residual Auction: Revised* 95 (2018), *available at* https://www.monitoringanalytics.com/reports/Reports/2018/IMM_Analysis_of_the_20212022_RPM_BRA_Revised_20180824.pdf (reporting that coal, natural gas, and nuclear collectively make up more than three-quarters of the generation mix in PJM).

[59] Order, 169 FERC ¶ 61,239 at P 87.

[60] *Cf.* EPSA Initial Testimony at 16-19; IPP Coalition Initial Testimony at 11.

[61] Order, 169 FERC ¶ 61,239 at PP 7, 40.

policy on federal markets in order to address the concern that resources will "submit offers into the PJM capacity market that do not reflect their actual costs."[62] "But the Commission cannot have it both ways."[63] If the MOPR disregards or nullifies federal policy, it must have the same effect on state policy. And if it does not nullify or disregard state policy, then the Commission has no reasoned justification for exempting federal subsidies from the MOPR.

31. The Commission cites to a number of cases for well-established canons of statutory interpretation, such as that the general cannot control the specific and that federal statutes must, when possible, be read harmoniously.[64] But those general canons provide no response to my concerns. The problem is that the Commission gives the MOPR one characterization in order to stamp out state policies and a different one in order to exempt federal policies. And if we assume that its characterization about the effect of the MOPR on state policies is accurate, then no number of interpretive canons can cure the Commission's arbitrary refusal to apply the MOPR to federal policies.

### 2. <u>The Commission's Disparate Offer Floors Discriminate Against New Resources</u>

32. In addition, the differing offer floors applied to new and existing resources are arbitrary and capricious. Today's order requires new resources receiving a State Subsidy to be mitigated to Net Cost of New Entry (Net CONE) while existing resources receiving a State Subsidy are mitigated to their Net Avoidable Cost Rate (Net ACR). The Commission suggests that this distinction is appropriate because new and existing resources do not face the same costs.[65] In particular, the Commission asserts that setting the offer floor for new resources at Net ACR would be inappropriate because that figure "does not account for the cost of constructing a new resource."[66]

33. That distinction does not hold water. As the Independent Market Monitor explained in his comments, it is illogical to distinguish between new and existing resources when defining what is (or is not) a competitive offer.[67] That is because, as a

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[62] June 2018 Order, 163 FERC ¶ 61,236 at P 153.

[63] *Atlanta Gas Light Co. v. FERC*, 756 F.2d 191, 198 (D.C. Cir. 1985); *California ex rel. Harris v. FERC*, 784 F.3d 1267, 1274 (9th Cir. 2015) (same).

[64] Order, 169 FERC ¶ 61,239 n.177.

[65] *Id.* P 138.

[66] *Id*.

[67] Independent Market Monitor Brief at 16 ("A competitive offer is a competitive

result of how most resources are financed, a resource's costs will not materially differ based on whether it is new or existing (*i.e.*, one that has cleared a capacity auction). That means that there is no basis to apply a different formula for establishing a competitive offer floor based solely on whether a resource has cleared a capacity auction. To the extent it is appropriate to consider the cost of construction for a new resource it is just as appropriate to consider the cost of construction for one that has already cleared a capacity auction. That is consistent with Net CONE, which calculates the nominal 20-year levelized cost of a resource minus its expected revenue from energy and ancillary services. Because that number is *levelized*, it does not change between a resource's first year of operation and its second.

34. However, as the Independent Market Monitor explains, Net CONE does not reflect how resources actually participate in the market.[68] Instead of bidding their levelized cost, both new and existing competitive resources bid their marginal capacity—*i.e.*, their net out-of-pocket costs, which Net ACR is supposed to reflect. Perhaps reasonable minds can differ on the question of which offer floor formula is the best choice to apply. But there is nothing in this record suggesting that it is appropriate to use different formulae based on whether the resource has already cleared a capacity auction.

35. It may be true that setting the offer floor at Net ACR for new resources will make it more likely that a subsidized resource will clear the capacity market, MOPR notwithstanding. Holding all else equal, the higher the offer floor, the less likely that a subsidized resources will clear, so a higher offer floor will more effectively block state policies. But that is not a reasoned explanation for the differing offer floors applied to new and existing resources.

### 3. The Commission Gives No Consideration to the Order's Impact on Existing Business Models

36. In its rush to block the impacts of state policies, the Commission ignores the consequences its actions will have on well-established business models. In particular, today's order threatens the viability, as currently constituted, of (1) aggregated demand response providers; (2) public power; and (3) resources financed in part through sales of voluntary renewable energy credits.

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offer, regardless of whether the resource is new or existing."); *id*. at 15-16 ("It is not an acceptable or reasonable market design to have two different definitions of a competitive offer in the same market. It is critical that the definitions be the same, regardless of the reason for application, in order to keep price signals accurate and incentives consistent.").

[68] *Id.*

### a. **Demand Response**

37. The Commission has long recognized that the end-use demand resources that are aggregated by a Curtailment Service Providers (CSP)—*i.e.*, a demand response aggregator—may not be identified years in advance of the delivery year.[69] The PJM market rules have permitted CSPs to participate in the Base Residual Auction without identifying all end-use demand resources.[70] That allowance is fundamental to the aggregated demand response business model, since, without it, short-lead time resources might never be able to participate in the Base Residual Auction. Today's order upends that allowance, extending the MOPR to any end-use demand resource that receives a State Subsidy. In practice, that means that a CSP will have to know all of its end-use demand resources prior to the Base Residual Auction (three years prior to the delivery year). Further complicating matters, today's order grandfathers existing demand response without indicating whether the grandfathering right attaches to the CSP or the end-use demand resources.

38. The potential damage to the CSP business model is especially puzzling because PJM indicated that the default offer floor for at least certain demand response resources should be at or near zero,[71] suggesting that even if they receive a subsidy, that subsidy would not reduce their offer below what this Commission deems a competitive offer. Demand response has provided tremendous benefits to PJM, both terms of improved

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[69] For example, recognizing that demand response is a "short-lead-time" resource, the Commission previously directed PJM to revise the allocation of the short-term resource procurement target so that short-lead resources have a reasonable opportunity to be procured in the final incremental auction. *PJM Interconnection L.L.C.*, 126 FERC ¶ 61,275 (2009). The Commission subsequently removed the short-term resource procurement target only after concluding that doing so would not "unduly impede the ability of Demand Resources to participate in PJM's capacity market." *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at PP 394, 397 (2015).

[70] Under PJM's current market rules, CSPs must submit a Demand Resource Sell Offer Plan (DR Sell Offer Plan) to PJM no later than 15 business days prior to the relevant RPM Auction. This DR Sell Offer Plan provides information that supports the CSP's intended DR Sell Offers and demonstrates that the DR being offered is reasonably expected to be physically delivered through Demand Resource Registrations for the relevant delivery year. *See* PJM Manual 18: PJM Capacity Market – Attachment C: Demand Resource Sell Offer Plan.

[71] PJM explains that, beyond the initial costs associated with developing a customer contract and installing any required hardware or software, that it could not identify any avoidable costs that would be incurred by an existing Demand Resource that would result in a MOPR Floor Offer Price of greater than zero. PJM Initial Brief at 47.

market efficiency and increased reliability.[72] I see no reason to risk giving up those gains based on an unsubstantiated concern about state policies.

### b. Public Power

39. The public power model predates the capacity market by several decades and is premised on securing a reliable supply of power for each utility's citizen-owners at a reasonable and stable cost, which often includes an element of long-term supply.[73] Today's order declares the entire public power model to be an impermissible state subsidy.[74] That is a stark departure from past precedent, which recognized that "the purpose and function of the MOPR is not to unreasonably impede the efforts of resources choosing to procure or build capacity under longstanding business models."[75]

40. It is also a fundamental threat to the long-term viability of the public power model. Although today's order exempts existing public power resources from the MOPR, it provides that all new public power development will be subject to mitigation. That means that public power's selection and development of new capacity resources will now be dependent on the capacity market outcomes, not the self-supply model on which it has traditionally relied. That fundamentally upends the public power model because it limits the ability of public power entities to choose how to develop and procure resources over a long time horizon.

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[72] In a 2019 report, Commission staff explained that demand response resources comprised 6.7 percent of peak demand in PJM and that PJM called on load management resources in October of 2019 to reduce consumption during a period of grid stress. *See* Federal Energy Regulatory Commission, *2019 Assessment of Demand Response and Advanced Metering* 17, 20 (2019), *available at* https://www.ferc.gov/legal/staff-reports/2019/DR-AM-Report2019.pdf. PJM has previously explained that the more that demand actively participates in the electricity markets, the more competitive and robust the market results. Also, if visible and dependable, demand response has proven to be a valuable tool for maintaining reliability both in terms of real-time grid stability and long-term resource adequacy. PJM Interconnection, *Demand Response Strategy* 1 (2017), *available at* https://www.pjm.com/~/media/library/reports-notices/demand-response/20170628-pjm-demand-response-strategy.ashx.

[73] American Municipal Power and Public Power Association of New Jersey Initial Brief at 14-15; American Public Power Association Initial Brief at 15.

[74] Order, 169 FERC ¶ 61,239 at P 65.

[75] *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 (2006).

### c. Voluntary Renewable Energy Credits

41. Today's order will also upend the business model of resources that sell renewable energy credits to businesses or individuals that purchase them voluntarily —*e.g.*, in order to meet corporate sustainability goals—rather to comply with a state mandate. Voluntary renewable energy credits have been an important driver behind the deployment of new renewable resources.[76] Although the Commission recognizes that a voluntary renewable energy credit is not a state subsidy, it nevertheless subjects resources that will generate them to the MOPR.[77] The Commission justifies that choice on the basis that a capacity resource cannot definitively know three years in advance how the credits it generates will ultimately be retired and by whom.[78] But that means that today's order is "mitigating the impact of *consumer preferences* on wholesale electricity markets"[79] just because they may potentially overlap with state policies.

42. But it is not at all clear why such an all-or-nothing rule is necessary. For example, the Commission could carry over the attestation approach it uses for the Competitive Entry Exemption[80] and allow a resource to submit an attestation stating that it will sell voluntary renewable energy credits to resources that are not subject to a state renewable portfolio standard with a contractual rider requiring immediate retirement to prevent any secondary transaction to an entity that may use it to meet its regulatory obligations. Moreover, PJM could presumably play an instrumental verification role since it administers the Generation Attribute Tracking System, the trading platform for renewable energy credits in PJM.[81] All told, the Commission's treatment of voluntary renewable energy credits creates an unnecessary threat to a valuable means of supporting clean energy.

## C. The Commission's Replacement Rate Does Not Result in a Competitive Market

43. By this point, the central irony in today's order should be clear. The Commission began this phase of the proceeding by decrying government efforts to shape the

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[76] *See* Advanced Energy Buyers Group Reply Brief at 2.

[77] Order, 169 FERC ¶ 61,239 at P 174.

[78] *Id.*

[79] Clean Energy Industries Initial Testimony at 6.

[80] Order, 169 FERC ¶ 61,239 at P 159.

[81] See *Id.* n. 314.

generation mix because they interfere with "competitive" forces.[82] Today, the Commission is solving that "problem" by creating a byzantine administrative pricing scheme that bears all the hallmarks of cost-of-service regulation, without any of the benefits. That is a truly bizarre way of fostering the market-based competition that my colleagues claim to value so highly.

44. As noted, the Commission's definition of subsidy will encompass vast swathes of the PJM capacity market, including new investments by vertically integrated utilities and public power, merchant resources that receive any one of the litany of subsidies available to particular resources or generation types, and almost any resource that benefits from a state effort to directly address the environmental externalities of electricity generation.[83] Moreover, the Commission's inaptly named Unit-Specific Exemption[84]—its principal response to concerns about over mitigation—is simply another form of administrative pricing. All the Unit-Specific Exemption provides is an escape from the relevant default offer floor. Resources are still required to bid above an administratively determined level, not at the level that they would otherwise participate in the market. And even resources that might appear eligible for the Competitive Entry Exemption may hesitant to take that option given the Commission's proposal to permanently ban from the capacity market any resource that invokes that exception and later finds itself subsidized.[85] Are those resources really going to wager their ability to participate in the capacity market on the proposition that their state will never institute a carbon tax, pass or join a cap-and-trade program, or create any other program that the Commission might deem an illicit financial benefit?

45. To implement this scheme, PJM and the Independent Market Monitor will need to become the new subsidy police, regularly reviewing the laws and regulations of 13 different states and D.C.—not to mention hundreds of localities and municipalities—in search of any provision or program that could conceivably fall within the Commission's definition of State Subsidy. "But that way lies madness."[86] Identifying the potential

[82] June 2018 Order, 163 FERC ¶ 61,236 at P 1.

[83] *See Supra* Section II.A.

[84] In today's order, the Commission renames what is currently the "Unit Specific *Exception*" in PJM's tariff to be a Unit Specific *Exemption*. But, regardless of name, it does not free resources from mitigation because they are still subject to an administrative floor, just a lower one. An administrative offer floor, even if based on the resource's actual costs does not protect against over-mitigation and certainly is not market competition.

[85] Order, 169 FERC ¶ 61,239 at P 160.

[86] David Roberts, *Trump's crude bailout of dirty power plants failed, but a subtler*

subsidies is just the start. Given the consequences of being subsidized, today's order will likely unleash a torrent of litigation over what constitutes a subsidy and which resources are or are not subsidized. Next, PJM will have to develop default offer floors for all relevant resource types, including many that have never been subject to mitigation in PJM or anywhere else—*e.g.*, demand response resources or resources whose primary function is not generating electricity. Moreover, given the emphasis that the Commission puts on the Unit-Specific Exemption as the solution to concerns about over-mitigation, we can expect that resources will attempt to show that their costs fall below the default offer floor, with many resorting to litigation should they fail to do so. The result of all this may be full employment for energy lawyers, but it has hardly the most obvious way to harness the forces of competition to benefit consumers, which, after all, is the whole reason these markets were set up in the first place.

46. Although this administrative pricing regime is likely to be as complex and cumbersome as cost-of-service regulation, it provides none of the benefits that a cost-of-service regime can provide. Most notably, the administrative pricing regime is a one-way ratchet that will only increase the capacity market clearing price. Unlike cost-of-service regulation, there is no mechanism for ensuring that bids reflect true costs. Nor does this pricing regime provide any of the market-power protections provided by a cost-of-service model. Once mitigated, resources are required to offer no *lower* than their administratively determined offer floor, but there is no similar prohibition on offering above that floor.[87]

### D. Today's Order Is a Transparent Attempt to Slow the Transition to a Clean Energy Future

47. Today's order serves one overarching purpose: To slow the transition to a clean energy future. Customers throughout PJM, not to mention several of the PJM states, are increasingly demanding that their electricity come from clean resources. Today's order represents a major obstacle to those goals. Although even this Commission won't come out and say that, the cumulative effect of the various determinations in today's order is unmistakable. It helps to rehash in one place what today's order achieves.

48. First, after establishing a broad definition of subsidy, the Commission creates several categorical exemptions that overwhelmingly benefit existing resources. Indeed,

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*bailout is underway* (Mar. 23, 2018), https://www.vox.com/energy-and-environment/2018/3/23/17146028/ferc-coal-natural-gas-bailout-mopr.

[87] Moreover, as discussed further below, *see infra* notes 100-102 and accompanying text, PJM's capacity market is structurally uncompetitive and lacks any meaningful market mitigation. There is every reason to believe that today's order will exacerbate the potential for the exercise of market power.

the exemptions for (1) renewable resources, (2) self-supply, and (3) demand response, energy efficiency, and capacity storage resources are all limited to existing resources.[88] That means that all those resources will never be subjected to the MOPR and can continue to bid into the market at whatever level they choose. In addition, new natural gas resources, remain subject to the MOPR and are not eligible to qualify for the Competitive Entry Exemption while existing natural gas resources are eligible.[89]

49. Second, as noted in the previous section, the Commission creates different offer floors for existing and new resources.[90] Using Net CONE for new resources and Net ACR for existing resources will systematically make it more likely that existing resources of all types can remain in the market, even if they have higher costs than new resources that might otherwise replace them. As the Independent Market Monitor put it, this disparate treatment of new and existing resources "constitute[s] a noncompetitive barrier to entry and . . . create[s] a noncompetitive bias in favor of existing resources and against new resources of all types, including new renewables and new gas fired combined cycles."[91]

50. Third, the mitigation scheme imposed by today's order will likely cause a large and systematic increase in the cost of capacity—at least 2.4 billion dollars per year.[92]

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[88] Order, 169 FERC ¶ 61,239 at PP 171, 200, 206.

[89] *Id.* PP 2, 41.

[90] *See supra* Section II.B.2.

[91] Internal Market Monitor Reply Brief at 4.

[92] Our estimate of the cost impact of today's order is a "back-of-the-envelope" calculation. I assume that all previously-cleared nuclear power plants that receive zero-emissions credits in Illinois and New Jersey (totaling 6,670 MW) are unlikely to clear the next auction. I also assume there would be a 25 percent reduction of the demand response resources that previously cleared the Base Residual Auction. *See supra* Section III.B.3.a. Together, these resources total 9,340 MW of capacity. I relied on PJM's finding that "[a]dding less than 2% of zero-priced supply to the area outside MAAC, for example, reduces clearing prices in the RTO by 10%" which provides some insight to the slope of the demand curve and the associated price sensitivity. See PJM Transmittal Letter, Docket No. ER18-1314-000, at 28 (2018). Applying this slope to the last capacity auction clearing price of $140/MW-day and removing 9,300 MW, assuming all else remains constant, the capacity clearing price could increase $40/MW-day resulting in a cost of $2.4 billion. *See* PJM Interconnection, *2021/2022 RPM Base Residual Auction Results*, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx (last visited Dec. 19, 2019).

Although that will appear as a rate increase for consumers, it will be a windfall to existing resources that clear the capacity market. That windfall will make it more likely that any particular resource will stay in the market, even if there is another resource that could supply the same capacity at far less cost to consumers.

51. And finally, today's order dismisses, without any real discussion, the June 2018 Order's fig leaf to state authority: The resources-specific FRR Alternative.[93] That potential path for accommodation was what allowed the Commission to profess that it was not attempting to block or (to use the language from today's order) nullify state public policies.[94] And, although implementing that option (or any of the alternative proposals for a bifurcated capacity market currently before us) would no doubt have been a daunting task, doing so at least had the potential to establish a sustainable market design by allowing state policies to have their intended effect on the resource mix. And that is why it is no longer on the table. It could have provided a path for states to continue shaping the energy transition—exactly what this new construct is designed to stop.

52. The Commission proposes various justifications for each of these changes, some of which are more satisfying than others. But don't lose the forest for the trees. At every meaningful decision point in today's order, the Commission has elected the path that will make it more difficult for states to shape the future resource mix. Nor should that be any great surprise. Throughout this proceeding, the Commission has directly targeted states' exercise of their authority over generation facilities, treating state authority as a problem that must be remedied by a heavy federal hand. The only thing that is new in today's order is the extent to which the Commission is willing to go. Whereas the June 2018 Order at least paid lip service to the importance of accommodating state policies,[95] today's order is devoid of any comparable sentiment.

53. The pattern in today's order will surely repeat itself in the months to come. The Commission puts almost no flesh on the bones of its subsidy definition and provides precious little guidance how its mitigation scheme will work in practice. Accordingly, most of the hard work will come in the compliance proceedings, not to mention the litany of section 205 filings, section 206 complaints, and petitions for a declaratory order seeking to address fact patterns that the Commission, by its own admission, has not yet bothered to contemplate. In each of those proceedings, the smart money should be on the Commission adopting what it will claim to be facially neutral positions that, collectively, entrench the current resource mix. Although the proceedings to come will inevitably

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[93] June 2018 Order, 163 FERC ¶ 61,236 at P 157.

[94] *See supra* Section II.A.

[95] June 2018 Order, 163 FERC ¶ 61,236 at P 161.

garner less attention than today's order, they will be the path by which the "quiet undoing" of state policies progresses.[96]

### E. Today's Order Makes No Effort to Consider the Staggering Cost that the Commission Is Imposing on Ratepayers

54. Today's order will likely cost consumers 2.4 billion dollars per year initially, even under conservative assumptions.[97] The Commission, however, does not even pretend to consider those costs when establishing the Replacement Rate. It is hard for me to imagine a more careless agency action than one that foists a multi-billion-dollar rate hike on customers without even considering, much less justifying, that financial burden.

55. And those costs will continue to grow with each passing year. Although today's order aims to hamper state efforts to shape the generation mix, it will not snuff them out entirely. In other words, there simply is no reason to believe that the Commission will succeed in realizing its "idealized vision of markets free from the influence of public policies."[98] As former Chairman Norman Bay aptly put it, "such a world does not exist, and it is impossible to mitigate our way to its creation."[99] But that means that, as a resource adequacy construct, the PJM capacity market will increasingly operate in an alternate reality, ignoring more and more capacity just because it receives some form of state support. It also means that customers will increasingly be forced to pay twice for capacity or, in different terms, to buy ever more unneeded capacity with each passing year. I cannot fathom how the costs imposed by a resource adequacy regime that is premised on ignoring actual capacity can ever be just and reasonable.

56. And those are just the first-order consequences of today's order. The record before us provides every reason to believe that this approach will lead to many other cost increases. For example, the Commission's application of the MOPR will exacerbate the potential for the exercise of market power in what PJM's Independent Market Monitor describes as a structurally uncompetitive market.[100] As the Institute for Policy Integrity

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[96] Danny Cullenward & Shelley Welton, *The Quiet Undoing: How Regional Electricity Market Reforms Threaten State Clean Energy Goals*, 36 Yale J. on Reg. Bull. 106, 108 (2019), *available at* https://www.yalejreg.com/bulletin/the-quiet-undoing-how-regional-electricity-market-reforms-threaten-state-clean-energy-goals/.

[97] *See supra* note 92.

[98] *N.Y. State Pub. Serv. Comm'n*, 158 FERC ¶ 61,137 (2017) (Bay, Chairman, concurring).

[99] *Id.*

[100] "The capacity market is unlikely to ever approach a competitive market

explained, expanding the MOPR will decrease the competitiveness of the market, both by reducing the number of resources offering below the MOPR price floor and changing the opportunity cost of withholding capacity.[101] With more suppliers subject to administratively determined price floors, resources that escape the MOPR—or resources with a relatively low offer floor—can more confidentially increase their bids up to that level, secure in the knowledge that they will still out-bid the mitigated offers. That problem is compounded by PJM's weak seller-side market power mitigation rules, which include a safe harbor for mitigation up to a market seller offer cap that has generally been well above the market-clearing price.[102]

57. Given those potential rate increases, one might think that the Commission would be at pains to evaluate the costs caused by today's order and to explain why and how the purported benefits of the Replacement Rate justify those costs. Instead, the Commission does not discuss the potential cost increases, much less justify them, even as it assures us that the Replacement Rate is just and reasonable. For an agency whose primary purpose is to protect consumers to so completely ignore the costs of its decision is both deeply disappointing and a total abdication of the responsibilities Congress gave us when it created this Commission.[103]

### F. **PJM and Its Stakeholders Deserve Better**

58. We have been down this road before. In the June 2018 Order, the Commission up ended the PJM capacity market, finding it unjust and unreasonable and providing PJM only vague guidance on how to remedy its concerns and nowhere near enough time to

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structure in the absence of a substantial and unlikely structural change that results in much greater diversity of ownership. Market power is and will remain endemic to the structure of the PJM Capacity Market. . . . Reliance on the RPM design for competitive outcomes means reliance on the market power mitigation rules." Monitoring Analytics, *Analysis of the 2021/2022 RPM Base Residual Auction: Revised* (2018).

[101] Institute for Policy Integrity Initial Brief at 14-16.

[102] For example, the RTO-wide market seller offer cap for the 2018 Base Residual Auction $237.56 per MW/day while the clearing price for the RTO-wide zone was $140.00 per MW/day. *See* PJM Interconnection, *2021/2022 RPM Base Residual Auction Results*, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx (last visited Dec. 19, 2019).

[103] *See, e.g.*, *California ex rel. Lockyer v. FERC*, 383 F.3d 1006, 1017 (9th Cir. 2004); *City of Chicago, Ill. v. FPC*, 458 F.2d 731, 751 (D.C. Cir. 1971) ("[T]he primary purpose of the Natural Gas Act is to protect consumers." (citing, *inter alia*, *City of Detroit v. FPC*, 230 F.2d 810, 815 (1955)).

develop a thoughtful solution. That profound act of "regulatory hubris"[104] led to the last year-and-a-half of indecision and undermined, perhaps fatally, a construct that is supposed to provide predictably and clear signals.

59. Today's order is much of the same. The Commission is embarking on a quixotic effort to mitigate the effects of any attempt to exercise the authority that Congress reserved to the states when it enacted the FPA. In so doing, the Commission has dropped even the pretense of accommodating states' exercise of that reserved authority.[105] Instead, the Commission appears dead set on refashioning the PJM capacity market from a construct based primarily on bids determined by the resources themselves to a construct that will inevitably rely on a pervasive program of administrative pricing. It is hard to overestimate the scope or the impact of the changes required by today's order. Given all that, you would think that the Commission would have learned its lesson from the June 2018 Order and provided PJM and its stakeholders detailed directives and plenty of time to work out the nuances associated with putting those directives into practices.

60. Instead, the Commission provides only a general definition of what constitutes a subsidy and gives PJM only 90 days to develop and file sweeping changes to the market. That is a patently unreasonable period of time in which to accomplish all that the Commission has put on PJM's plate. For example, to implement the definition of State Subsidy in today's order, PJM will have to develop a process to routinely review the regulatory structure of all thirteen PJM states and D.C. to identify every potential benefit available under any state or local law.[106] Moreover, the Commission is requiring PJM to produce new zonal default Net CONE and net ACR values for all resource types, many of which have dissimilar cost structures and have never been the subject of this sort of analysis in the past. To properly set a default offer floors and establish a fair and transparent process for conducting unit-specific reviews, PJM needs time to work with its Independent Market Monitor and its stakeholders. Not allowing PJM and its stakeholders to have that time will surely lead to unintended consequences, including, potentially, another round of the delays that have plagued this proceeding ever since the Commission issued the June 2018 Order.

61. Frankly put, the Commission has bungled this process from the start and today's order provides little reason for optimism. I have sympathy for anyone (or any state) that is losing confidence in the Commission's ability to responsibly manage resource adequacy, especially in the age of climate change as more and more states contemplate

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[104] June 2018 Order, 163 FERC ¶ 61,236 (LaFleur, Comm'r, dissenting at 5).

[105] *Id.* P 161.

[106] Recall that the Commission rejects PJM's proposal to include a *de minimus* exception in the subsidy definition. Order, 169 FERC ¶ 61,239 at P 96.

the type of clean energy programs to which the current Commission is so obviously opposed. I fear that the most likely outcome of today's order is that more PJM states will contemplate ways to reduce their exposure to the Commission's hubris, including abandoning the PJM capacity market and potentially exiting PJM altogether. Should that come to pass, the Commission will have no one to blame but itself.

* * *

62. One final point. I fully recognize that the PJM states are doing far more to shape the generation mix than they were when the original settlement established the PJM Reliability Pricing Model in 2006.[107] It may well be that a mandatory capacity market is no longer a sensible approach to resource adequacy at a time when states are increasingly exercising their authority under the FPA to shape the generation mix. Indeed, the conclusion that I draw from the record in front of us is not that there is an urgent need to mitigate the effects of state public policies, but rather that we should be taking a hard look at whether a mandatory capacity market remains a just and reasonable resource adequacy construct in today's rapidly evolving electricity sector. It is a shame that we have not spent the last two years addressing *that* question instead of how best to stymie state public policies.

For these reasons, I respectfully dissent.

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Richard Glick
Commissioner

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[107] *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 (2006).

Document Content(s)

171 FERC ¶ 61,034
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick, Bernard L. McNamee,
and James P. Danly.

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|---|---|
| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC<br>v.<br>PJM Interconnection, L.L.C. | Docket Nos. EL16-49-001 |
| PJM Interconnection, L.L.C. | EL18-178-001 |
| PJM Interconnection, L.L.C. | ER18-1314-002<br>(Consolidated) |

ORDER ON REHEARING AND CLARIFICATION

(Issued April 16, 2020)

1. This order addresses requests for rehearing and clarification of the Commission's order issued in this proceeding on June 29, 2018, which (i) rejected proposed tariff revisions filed by PJM Interconnection, L.L.C. (PJM) pursuant to section 205 of the Federal Power Act (FPA);[1] (ii) granted in part, and denied in part, the complaint filed by Calpine Corporation and additional generation entities (collectively, Calpine) against

[1] 16 U.S.C. § 824d.

PJM; and (iii) instituted a proceeding under section 206 of the FPA[2] regarding PJM's Open Access Transmission Tariff (Tariff) Minimum Offer Price Rule (MOPR) and the MOPR's failure to address the price distorting impact of resources receiving out-of-market support in PJM's capacity market.[3] PSEG Companies (PSEG),[4] PJM, the Organization of PJM States, Inc. (OPSI), Old Dominion Electric Cooperative (ODEC), New Jersey Board of Public Utilities (New Jersey Board), Maryland Public Service Commission (Maryland Commission), Joint Consumer Advocates,[5] PJM Industrial Customer Coalition (PJM-ICC), People of the State of Illinois (Illinois AG), Illinois Commerce Commission (Illinois Commission), FirstEnergy Service Company (FirstEnergy), Exelon Corporation (Exelon), Dominion Energy Services, Inc. (Dominion), Clean Energy Associations,[6] Clean Energy Advocates,[7] and American Public Power Association, American Municipal Power and the Public Power Association of New Jersey (collectively, Public Power Entities) filed requests for rehearing or clarification of the June 2018 Order. For the reasons discussed below, we deny the requests for rehearing, and grant the requests for clarification.[8]

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[2] 16 U.S.C. § 824e (2018).

[3] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 (2018) (June 2018 Order).

[4] PSEG Companies include the Public Service Electric and Gas Company, PSEG Power LLC, and PSEG Energy Resources & Trade LLC.

[5] Joint Consumer Advocates consist of: Office of the People's Counsel for the District of Columbia, Citizens Utility Board, Maryland Office of People's Counsel, Kentucky Office of the Attorney General, and Office of Rate Intervention.

[6] Clean Energy Associations consist of: Advanced Energy Economy, American Council on Renewable Energy, American Wind Energy Association, and Solar Energy Industries.

[7] Clean Energy Advocates consist of: Earthjustice, Natural Resources Defense Council, Sierra Club, Sustainable FERC Project, and Environmental Defense Fund.

[8] On April 16, 2020, Commissioner Bernard L. McNamee issued a memorandum to the file documenting his decision not to recuse himself from these dockets, based on memoranda dated April 13, 2020, December 13, 2019, October 11, 2019, January 28, 2019, and January 2, 2019, (and attachments thereto, including email communications dated June 17 and September 17, 2019) from the Designated Agency Ethics Official and Associate General Counsel for General and Administrative Law in the Office of General Counsel.

## I. June 2018 Order

2. On March 21, 2016, Calpine filed a complaint in Docket No. EL16-49-000 (Calpine Complaint) asserting that PJM's MOPR is unjust and unreasonable because it does not address the impact of subsidized resources on the capacity market. Calpine proposed interim Tariff revisions for immediate implementation that would extend the MOPR to a limited set of existing resources and asked the Commission to direct PJM to conduct a stakeholder process to develop and submit a long-term solution.[9] Subsequently, on April 9, 2018, PJM proposed revisions to the Tariff in Docket No. ER18-1314-000 (April 2018 Filing), aimed at addressing the price impacts of state out-of-market support for capacity resources. PJM proposed two mutually exclusive alternatives. The first, referred to as Capacity Repricing, involved a two-stage annual auction, with capacity commitments first determined in stage one of the auction and the clearing price set separately in stage two. The second, referred to as MOPR-Ex, would have extended PJM's MOPR to include both new and existing resources, subject to certain proposed exemptions.[10]

3. The June 2018 Order rejected PJM's Capacity Repricing proposal, finding that "it is unjust and unreasonable to separate the determination of price and quantity for the sole purpose of facilitating the market participation of resources that receive out-of-market support."[11] The Commission also rejected PJM's MOPR-Ex proposal as unjust and unreasonable and unduly discriminatory. The Commission found that PJM failed to provide a "valid reason for the disparity among resources" that receive out-of-market support through Renewable Portfolio Standards (RPS) programs, which were exempt from the MOPR-Ex proposal, and other state-sponsored resources, which were not.[12]

4. Next, although the Commission rejected PJM's April 2018 Filing, it found based on the record of that proceeding and also the Calpine Complaint proceeding that PJM's existing MOPR failed to protect the wholesale capacity market against price distortions from out-of-market support for uneconomic resources. The Commission stated that the Tariff "allows resources receiving out-of-market support to significantly affect capacity prices in a manner that will cause unjust and unreasonable and unduly discriminatory rates in PJM regardless of the intent motivating the support."[13] The Commission further

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[9] June 2018 Order, 163 FERC ¶ 61,236 at P 3.

[10] *Id*. P 4.

[11] *Id*. P 64.

[12] *Id*. P 100.

[13] *Id*. P 156.

stated that out-of-market support by states has reached a "level sufficient to significantly impact the capacity market clearing prices and the integrity of the resulting price signals on which investors and consumers rely to guide the orderly entry and exit of capacity resources."[14] The Commission explained that out-of-market support permits new and existing resources to submit low or zero price offers into the capacity market, resulting in price distortions and cost shifts while retaining uneconomic resources.[15]

5. In the June 2018 Order, although the Commission found PJM's Tariff unjust and unreasonable, the Commission stated that it could not make a final determination regarding a just and reasonable replacement rate based on the record presented. The Commission thus initiated a *sua sponte* FPA section 206[16] paper hearing proceeding to allow parties to submit additional arguments and evidence regarding the replacement rate.[17] The Commission posited that the replacement rate should expand the MOPR to cover out-of-market support for all new and existing resources, regardless of type, with few to no exemptions.[18] The June 2018 Order also sought comment on the potential use of a resource-specific Fixed Resource Requirement (FRR) Alternative as a method of accommodating resources that receive out-of-market support while protecting the integrity of the PJM capacity market for competitive resources and load.[19] The order on the paper hearing establishing the replacement rate was issued on December 19, 2019.[20]

## II. Requests for Rehearing and Clarification

6. On July 30, 2018, PSEG, OPSI, New Jersey Board, Maryland Commission, Illinois AG, Illinois Commission, Exelon, Clean Energy Associations, Clean Energy Advocates, and Public Power Entities submitted requests for rehearing. PJM, Dominion, and PJM-ICC submitted requests for rehearing and clarification. ODEC and FirstEnergy

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[14] *Id.*

[15] *Id.* PP 150, 153-155.

[16] 16 U.S.C. § 824e.

[17] June 2018 Order, 163 FERC ¶ 61,236 at PP 8, 149, 157, 164-72.

[18] *Id.* P 158.

[19] *Id.* PP 160-61.

[20] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,239 (2019) (December 2019 Order). Requests for rehearing and clarification of the December 2019 Order will be addressed in a separate order.

filed requests for clarification or, in the alternative, rehearing. Joint Consumer Advocates submitted a request for rehearing or, in the alternative, extension of time.

7. The requests for rehearing and clarification in this proceeding generally raise issues concerning the Commission's finding, pursuant to FPA section 206, that PJM's then-existing Tariff was unjust and unreasonable, including arguments that: (1) the June 2018 Order lacked sufficient evidentiary and economic support; (2) the Commission failed to justify its departure from Commission precedent; (3) the June 2018 Order exceeded the Commission's jurisdiction; (4) the June 2018 Order requires clarification as to its undue discrimination finding and scope of out-of-market support; (5) the June 2018 Order established an unreasonable hearing schedule, among other procedural arguments; and (6) the June 2018 Order outlined a replacement rate that has not been shown to be just and reasonable or otherwise requires clarification. Parties ask the Commission to reverse its section 206 finding and either retain the status quo[21] or direct PJM to work with stakeholders on how to address state programs.[22] As to PJM's April 2018 Filing, parties do not seek rehearing of the Commission's rejection of the April 2018 Filing, but rather raise concerns with the language the Commission used to reject Capacity Repricing,[23] as discussed further below.

## A. Substantive Matters

### 1. Support for Section 206 Determination that PJM's Existing Tariff is Unjust and Unreasonable

#### a. Requests for Rehearing and Clarification

8. Parties argue that the Commission failed to meet its burden under section 206 of the FPA to demonstrate that PJM's then-existing Tariff was unjust and unreasonable because the June 2018 Order lacked sufficient evidentiary support.[24] Parties argue that

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[21] PSEG Rehearing Request at 4.

[22] Dominion Rehearing and Clarification Request at 2; *see also* Public Power Entities Rehearing Request at 6.

[23] PJM Clarification and Rehearing Request at 8-9; Clean Energy Advocates Rehearing Request at 53; Illinois Rehearing Request at 17.

[24] Public Power Entities Rehearing Request at 6-15; PJM-ICC Rehearing and Clarification Request at 10-11; Clean Energy Associations Rehearing Request at 19; Clean Energy Advocates Rehearing Request at 21-22; OPSI Rehearing Request at 4-5; New Jersey Board Rehearing Request at 2-6; OPSI Rehearing Request at 307; Maryland Commission Rehearing Request at 4, 15-18; Exelon Rehearing Request at 12-13; Dominion Rehearing and Clarification Request at 6, 7-13; PJM-ICC Rehearing and

the Commission failed to show that the existing rate is "entirely outside of the zone of reasonableness" before imposing a new rate.[25] By contrast, PJM agrees with the Commission's finding that Tariff changes are needed, which PJM asserts is "amply supported by the record."[26]

**i. <u>Scope of Section 206 Finding and Identity of State Programs Causing Impacts</u>**

9. Clean Energy Advocates, Clean Energy Associations, and Public Power Entities argue that by postponing the task of defining the scope of the Commission's section 206 finding to a subsequent paper hearing proceeding, the Commission violated its FPA section 206 duty to order a replacement rate only *after* finding that the existing Tariff was unlawful.[27] Clean Energy Associations state that the fact that the Commission finds PJM's existing MOPR unjust and unreasonable, but requests comment on the appropriate scope of out-of-market support to be mitigated, suggests that the Commission has not clearly identified a problem with the existing MOPR.[28] Clean Energy Advocates assert that the scope of the Commission's authority to establish a replacement rate under section 206 of the FPA must be guided by the scope of the finding that the existing rate is unjust and unreasonable; i.e., the scope of the replacement rate should be tailored to the severity of the FPA violation.[29] By not conclusively finding which out-of-market mechanisms

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Clarification Request at 2, 8, 10-16; PSEG Rehearing Request at 2, 4, 6-11; Clean Energy Associations Rehearing Request at 3, 11-20; Joint Consumer Advocates Rehearing and Extension Request at 2, 3, 7-14; Illinois AG Rehearing Request at 3, 4, 5-9; Clean Energy Advocates Rehearing Request at 2-4, 7-8, 19-23, 35-48; Illinois Commission Rehearing Request at 3, 6-11.

[25] Clean Energy Associations Rehearing Request at 14 (quoting *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 114 n.2 (D.C. Cir. 2017)); *see also* Joint Consumer Advocates Rehearing and Extension Request at 7.

[26] PJM Clarification and Rehearing Request at 3-4 (citing June 2018 Order, 163 FERC ¶ 61,236 at PP 5-6, 150-156).

[27] Clean Energy Advocates Rehearing Request at 19, 21-22.

[28] Clean Energy Associations Rehearing Request at 20; Public Power Entities Rehearing Request at 9.

[29] Clean Energy Advocates Rehearing Request at 22 (citing *Colo. Office of Consumer Counsel v. FERC*, 490 F.3d 954, 956 (D.C. Cir. 2007)).

render the Tariff unjust and unreasonable, Public Power Entities contend that the Commission did not meet its section 206 burden.[30]

10. Parties similarly argue that the Commission failed to define or explain what constitutes a subsidy, what qualifies as "meaningful" out-of-market support or what state programs cause price suppression.[31] PJM-ICC states that the Commission failed to draw the line separating subsidies that threaten the market from subsidies that do not, and suggests that it would be difficult to draw that line given that nearly all resources receive some kind of state, federal, or local support.[32] Parties also claim that the Commission failed to explain how the state programs singled out in the June 2018 Order threaten the integrity of the market, while state support in other forms, such as rate-basing existing coal resources, does not.[33]

**ii. <u>Price Suppression</u>**

11. Parties argue that the Commission failed to demonstrate that PJM's existing MOPR is unjust and unreasonable because the Commission failed to cite evidence showing that state out-of-market support is causing price suppression.[34] Parties contend that the Commission did not quantify the impact of state subsidies on capacity markets, or the amount of out-of-market support that harms the market, alleging that the June 2018 Order contained no quantitative evidence linking state programs to auction clearing

[30] Public Power Entities Rehearing Request at 8-9.

[31] Clean Energy Advocates Rehearing Request at 20 (stating that the Commission sought comment on defining terms); Clean Energy Associations Rehearing Request at 18-19; Dominion Rehearing and Clarification Request at 8-10.

[32] PJM-ICC Rehearing and Clarification Request at 21.

[33] Clean Energy Advocates Rehearing Request at 43-45.

[34] New Jersey Board Rehearing Request at 4 n.17 (no evidence that New Jersey support for resources causes price suppression or that the Zero Emission Credit (ZEC) program resulted in suppressed prices); Illinois Commission Rehearing Request at 3, 6-8; Exelon Rehearing Request at 12; *see also* OPSI Rehearing Request at 5-6; Maryland Commission Rehearing Request at 15 (no data supporting conclusions that state subsidies undermine capacity market); Public Power Entities Rehearing Request at 13; Clean Energy Advocates Rehearing Request at 37, 46-48; Joint Consumer Advocates Rehearing and Extension Request at 7-9.

prices.[35] Exelon argues that the Commission has not demonstrated that out-of-market payments actually impact prices because the June 2018 Order did not explain what the Commission would consider a "significant" impact on prices or evidence showing the cumulative impact of state subsidies on capacity prices has increased.[36]

12. Clean Energy Associations state that, while the Commission may rely on either theory or specific evidence to support a section 206 unjust and unreasonable finding, it must still have record evidence to support both, which they assert that the June 2018 Order does not.[37] Public Power Entities argue that the Commission may rely on economic theory but should only do so where empirical evidence is difficult to find, not here where the Commission should have been able to develop an empirical record of the relationship between out-of-market support and capacity auction results.[38] Similarly, parties contend that if state subsidies are causing price suppression, evidence should be available to substantiate it, especially since some state subsidies have long been in existence.[39]

13. Some parties assert that potential price suppression caused by future subsidies does not render the current Tariff unjust and unreasonable.[40] Similarly, parties allege that, rather than actual data or proof demonstrating that current capacity prices are unjust

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[35] Maryland Commission Rehearing Request at 18; Public Power Entities Rehearing Request at 11-14; Dominion Rehearing and Clarification Request at 8-10; Illinois Commission Rehearing Request at 8; Clean Energy Associations Rehearing Request at 11, 18-19 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 149); PJM-ICC Rehearing and Clarification Request at 15 (the Commission failed to quantify or explain the "level [of out-of-market support] sufficient to significantly impact" the market (citing June 2018 Order, 163 FERC ¶ 61,236 at P 156)).

[36] Exelon Rehearing Request at 12.

[37] Clean Energy Associations Rehearing Request at 11 (citing *Nat'l Fuel Gas Supply Corp. v. FERC*, 468 F.3d 831 (D.C. Cir. 2006)).

[38] Public Power Entities Rehearing Request at 13-14 (citing *Emera Me. v. FERC*, 854 F.3d 662, 671 (D.C. Cir. 2017); *see also* Dominion Rehearing Request at 8 (recognizing that the Commission may rely on theory but cannot divorce its decision-making from the facts).

[39] New Jersey Board Rehearing Request at 6; Clean Energy Advocates Rehearing Request at 41-43; Illinois Commission at 7; Illinois AG Rehearing Request at 8.

[40] PJM-ICC Rehearing and Clarification Request at 14.

and unreasonable, the June 2018 Order relies instead on speculation about future harm to the capacity market.[41]

14. Parties argue that the Commission's reliance on the affidavit submitted by PJM economist, Dr. Anthony Giacomoni, is not sufficient evidence to justify the Commission's findings in the June 2018 Order that all out-of-market support leads to below-cost offers[42] or that state out-of-market support impacts clearing prices.[43] Dominion states the affidavit does not analyze whether, and if so how, market participants change their behavior in response to out-of-market payments.[44] According to Dominion, the affidavit also acknowledges that "[w]hether REC revenues make an individual project economic will depend on many factors," and that there are situations "where REC revenues may have little impact."[45] Similarly, Joint Consumer Advocates contend that any state subsidy or policy that impacts a large number of generation facilities in the market will necessarily have a rate impact, but that fact, in itself, does not mean that the resulting capacity market prices are unjust and unreasonable.[46] Because the

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[41] Illinois Commission Rehearing Request at 7-9; PJM-ICC Rehearing and Clarification Request at 14 (the June 2018 Order "draws a series of sweeping conclusions that are not tied to current conditions in PJM's capacity market, not supported by footnote citations or record evidence, and thus not supported by substantial evidence"; Commission only relied on future projection of impact); Dominion Rehearing and Clarification Request at 8-10, 11-13 (no evidence of present day harm, only speculative future outcomes); PSEG Rehearing Request at 9-10.

[42] Dominion Rehearing and Clarification Request at 10-11.

[43] Public Power Entities Rehearing Request at 13; Exelon Rehearing Request at 13 (also arguing that the affidavit does not address the integrity of the capacity market's price signals); New Jersey Board Rehearing Request at 5; Clean Energy Associations Rehearing Request at 12.

[44] Dominion Rehearing and Clarification Request at 10 (stating that Dr. Giacomoni prefaced his testimony that "my affidavit does not attempt to calculate whether each resource that receives a state subsidy would enter service, or would remain in service, without the subsidy").

[45] *Id*. at 11 (citing Giacomoni Aff. ¶ 22); *see also* Joint Consumer Advocates Rehearing and Extension Request at 10-11 (affidavit recognizes that not all resources depend on state subsidies to be economic, and the size of the subsidy does not itself dictate whether a resource would be otherwise economic) (citing Giacomoni Aff. ¶¶ 30, 36).

[46] Joint Consumer Advocates Rehearing and Extension Request at 9-10.

affidavit from Dr. Giacomoni only analyzes the impacts from ZECs, Clean Energy Associations argue that the Commission should not have extrapolated this analysis to the impacts of a broader set of state policies.[47]

### iii. Contradictory Evidence

15. Parties argue that the June 2018 Order is not based on sufficient evidence because the record demonstrates that PJM's capacity market is currently robust and functioning well. Parties point out that PJM's capacity market has resulted in a capacity surplus, well in excess of the level required to ensure reliability, and that new entry has grown each year.[48] Specifically, parties state that approximately 40 GWs of natural gas-fired generation is under development in PJM, equivalent to nearly a quarter of the installed capacity in the region.[49] This demonstrates, parties contend, that the capacity auction continues to attract new entry,[50] which should push prices down.[51]

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[47] Clean Energy Associations Rehearing Request at 12 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 152).

[48] Maryland Commission Rehearing Request at 15-18 (stating that the 2018 auction achieved a reserve margin of 22%, above the target reserve margin of 15.8%); OPSI Rehearing Request at 6-7; Illinois Commission Rehearing Request at 10 (there is 66,000 MWs of capacity under development in PJM); Exelon Rehearing Request at 9; PSEG Rehearing Request at 4, 8-11; Dominion Rehearing and Clarification Request at 15; Clean Energy Associations Rehearing Request at 17, 35; Illinois AG Rehearing Request at 3, 4, 6-9; PJM-ICC Rehearing and Clarification Request at 11-13, 15-16; Clean Energy Associations Rehearing Request at 3, 14-18; New Jersey Board Rehearing Request at 4-5.

[49] PJM-ICC Rehearing and Clarification Request at 12; PSEG Rehearing Request at 2, 9; Exelon Rehearing Request at 10; Clean Energy Associations Rehearing Request at 17; Clean Energy Advocates Rehearing Request at 40; Illinois AG Rehearing Request at 8-9; Illinois Commission Rehearing Request at 10 (new entry shows that resources are able to cover their costs in the current market).

[50] Joint Consumer Rehearing and Extension Request at 8 (capacity market attracts new entry with 1,401 MW of new generation clearing the most recent auction); Exelon Rehearing Request at 10; OPSI Rehearing Request at 6-7 (citing Monitoring Analytics, LLC, *State of the Market Report for PJM-2013* (2014), *State of the Market Report for PJM-2017* (2017), *Quarterly State of the Market Report for PJM-2018* (2018)).

[51] Illinois AG Rehearing Request at 9.

16. Likewise, parties argue that the Commission made no showing that state subsidies are resulting in prices that fail to incentivize an adequate supply of capacity resources, pointing to evidence that the capacity auction for the 2021/2022 delivery year cleared with a 22% reserve margin.[52] Parties further note that the North American Electric Reliability Corp. (NERC) has determined that the current reserve margin is more than double what is needed,[53] the latest planning reserve margin for summer 2018 is 28.7%,[54] suggesting that PJM will not face a near-term shortfall, and that 165.1 GWs of unforced capacity cleared PJM's most recent auction.[55] Exelon contends that, because the Commission failed to show that there is a resource adequacy concern, the Commission cannot mandate MOPR reforms under the theory that prices are too low and investors have insufficient confidence in the market.[56] Similarly, PJM-ICC asserts that, if the

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[52] Public Power Entities Rehearing Request at 14-15; PJM-ICC Rehearing and Clarification Request at 11; Illinois Commission Rehearing Request at 10; PSEG Rehearing Request at 19; Joint Consumer Advocates Rehearing and Extension Request at 8 (citing PJM 2021/2022 RPM Base Residual Action Results at 1, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx).

[53] PJM-ICC Rehearing and Clarification Request at 11-12 (citing North American Electric Reliability Corporation, *2018 Summer Reliability Assessment*, at 24, https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_05252018_Final.pdf); Dominion Rehearing and Clarification Request at 15; PSEG Rehearing Request at 2, 9.

[54] Clean Energy Associates Rehearing Request at 17 (citing PJM, *2017 PJM Reserve Requirement Study*, at 8 (Mar. 9, 2018), https://www.pjm.com/-/media/committees-groups/committees/pc/20171012/20171012-item-03a-2017-pjm-reserve-requirement-study.ashx); Clean Energy Advocates Rehearing Request at 39-40.

[55] Dominion Rehearing and Clarification Request at 15-16; *see also* Exelon Protest, Docket No. ER18-1314-000, at 33 (filed May 7, 2018).

[56] Exelon Rehearing Request at 14; *see also* Clean Energy Advocates Rehearing Request at 40-41 (recent informal Platts poll suggests that investors think PJM is the best place to earn a targeted rate of return on new generation).

June 2018 Order finds that the capacity market is already failing, that finding is contradicted by the record evidence demonstrating large reserve margins.[57]

17. Parties also argue that, contrary to Calpine's complaint that capacity prices are low, the evidence demonstrates that auction clearing prices are high. Joint Consumer Advocates state that the clearing price for the 2021/2022 delivery year was $140/MW-day, the third largest in the capacity auction's history, and up from the previous year's price of $76.53/MW-day.[58] The Illinois AG similarly argues that the Commission did not address the fact that the clearing price for the Commonwealth Edison Locational Delivery Area (ComEd LDA) exceeded the rest of the PJM area's clearing price by as much as 100% for delivery years starting in 2019/2020, despite the Illinois ZEC program providing support for nuclear generators in the ComEd LDA.[59]

### iv. **Effect of Subsidies on Price**

18. Parties contend that the Commission failed to consider evidence indicating that state subsidies should not have a significant effect on capacity prices.[60] Specifically, Clean Energy Advocates argue that the Commission did not respond to arguments by the Institute for Policy Integrity that state RPS programs could result in either little to no change in prices or even result in price increases because renewable resources have limited participation in the capacity market, those that participate affect prices only when the "resource is marginal or would not have entered the market but for state support," and that state climate policies may actually result in higher capacity market prices because such policies may cause conventional generators, which are more frequently marginal, to offer higher as a result of decreased energy revenues due to competition from renewable resources.[61] Parties further argue that renewable energy credits (RECs) are generally

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[57] PJM-ICC Rehearing and Clarification Request at 15-16; *see also* PJM-ICC Rehearing and Clarification Request at 12-13 (claiming that PJM and the IMM have indicated that the capacity market is functioning properly); Joint Consumer Advocates Rehearing and Extension Request at 7.

[58] Joint Consumer Advocates Rehearing and Extension Request at 7-8.

[59] Illinois AG Rehearing Request at 7-8.

[60] Joint Consumer Advocates Rehearing and Extension Request at 11-12; Clean Energy Advocates Rehearing Request at 38-39, 41-46; Clean Energy Associations Rehearing Request at 13-16; Illinois AG Rehearing Request at 8.

[61] Clean Energy Advocates Rehearing Request at 38; *see also* Illinois AG Rehearing Request at 8 (variable resources make up a limited contribution to the capacity market); Clean Energy Associations Rehearing Request at 14-16.

competitively procured, which drives down their price and results in efficient market outcomes.[62]

19. Clean Energy Advocates also contend that the increase in state RPS targets, on which the Commission relied to support its finding that the existing Tariff is unjust and unreasonable, will not necessarily result in greater capacity market participation by state-supported resources because RPS targets may be met in other ways and/or be subject to state spending caps, and RPS resources may choose not to participate in the capacity market. Clean Energy Associations argue that, even if RPS resources do participate in the market, there is no evidence their participation in the capacity market is materially aided by state subsidies, required by a state program providing the subsidy, or aimed at influencing wholesale prices.[63] Parties also argue that not all RPS resources depend on state support.[64]

20. In addition, Clean Energy Advocates and Clean Energy Associations assert that the Commission failed to address analysis showing that participation of subsidized resources is known well in advance of the capacity auction and that the market therefore generally adjusts to this participation without major impacts.[65] Joint Consumer Advocates argue that subsidies should not impact the clearing price, explaining that there has been substantial entry and exit in the PJM capacity market, as well as increasing offers at prices close to clearing prices, which indicates the supply curve is becoming generally more sloped over time. Joint Consumer Advocates assert that new entry generally offers at low prices regardless of whether such resources receive state policy support.[66]

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[62] Clean Energy Associations Rehearing Request at 13; *see also* Clean Energy Advocates Rehearing Request at 45-46.

[63] Clean Energy Associations Rehearing Request at 13-15; *see also* Clean Energy Advocates Rehearing Request at 38, 45-47.

[64] Clean Energy Associations Rehearing Request at 13.

[65] *Id. at* 16 (citing evidence that capacity markets readily absorb subsidized resources without significant impact); *see also* Joint Consumer Advocates Rehearing and Extension Request at 11-12 (citing the Wilson Affidavit as contradictory evidence that subsidized resources impair market integrity and investor confidence).

[66] Joint Consumer Advocates Rehearing and Extension Request at 11-12; *see also* Clean Energy Advocates Rehearing Request at 25 (asserting that zero dollar offers are common and often enabled by factors beyond subsidies).

21. The Illinois AG argues that REC and RPS programs cannot reasonably be considered to be unduly suppressing capacity prices because they have been incorporated into the PJM capacity market since its inception. Similarly, Clean Energy Advocates state that the Commission failed to address evidence that government policies have long provided substantial support to certain types of capacity resources and argue there is no reason to believe that historic policy actions would have less impact on market prices than the Commission contends they do today.[67]

**v. <u>Uncertainty</u>**

22. Some parties take issue with the June 2018 Order's statement that the price distortions caused by out-of-market payments "create significant uncertainty, which may further compromise the market, because investors cannot predict whether their capital will be competing against resources that are offering into the market based on actual costs or on state subsidies."[68] Several parties agree with Commissioner Glick's dissent[69] that the uncertainty created by state policies is not different or worse than other uncertainty attendant to the electricity industry.[70] Parties assert that the June 2018 Order and the changing market rules contribute more to investor uncertainty than resources receiving out-of-market support.[71] In focusing on the need to avoid uncertainty with regard to whether resources are offering based on actual costs or subsidies, Public Power Entities argue that the Commission fails to account for the interest of investors in existing resources who may have relied on the current MOPR.[72] Joint Consumer Advocates contend that the Commission should balance investor interests against those of consumers, such as how the proposed revisions may increase consumer costs, asserting

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[67] Clean Energy Advocates Rehearing Request at 41-43.

[68] Dominion Rehearing and Clarification Request at 10 (quoting June 2018 Order, 163 FERC ¶ 61,236 at P 150).

[69] June 2018 Order, 163 FERC ¶ 61,236, Glick Dissent at 11-12.

[70] Exelon Rehearing Request at 13; PJM-ICC Rehearing and Clarification Request at 14; PSEG Rehearing Request at 10-11; Dominion Rehearing Request at 10.

[71] PJM-ICC Rehearing and Clarification Request at 20-21, New Jersey Board Rehearing Request at 9; Joint Consumer Advocates Rehearing and Extension Request at 12-13.

[72] Public Power Entities Rehearing Request at 21-23 (citing *N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d 74, 102 (3rd Cir. 2014) (*NJBPU*) ("It is more than mildly disturbing" that FERC would endorse a state-mandate exemption "only to later pull the rug out from under those who were persuaded that the exemption was somehow real."')).

that the Commission did not attempt to consider costs of finding PJM's existing Tariff unjust and unreasonable.[73]

**b. Commission Determination**

**i. Scope of Section 206 Finding and Identity of State Programs Causing Impacts**

23. We disagree that the Commission failed to meet its FPA section 206 burden to demonstrate that PJM's existing Tariff is unjust and unreasonable and therefore deny rehearing requests on this point. As an initial matter, the Commission did not err by first finding the Tariff unjust and unreasonable because the capacity market rules do not account for out-of-market support, and then instituting a paper hearing to determine the scope of out-of-market support to be mitigated. In the June 2018 Order, the Commission expressly found that PJM's existing Tariff is unjust and unreasonable because it "fails to protect the integrity of competition in the wholesale capacity market against unreasonable price distortions and cost shifts caused by out-of-market support to keep existing uneconomic resources in operation, or to support the uneconomic entry of new resources."[74] The June 2018 Order explained that the price distortions resulting from this out-of-market support "compromise the capacity market's integrity" and create investor uncertainty because "investors cannot predict whether their capital will be competing against resources that are offering into the market based on actual costs or on state subsidies."[75] Thus the Commission met its initial burden under FPA section 206. The fact that the Commission may need additional information to determine the exact scope of the replacement rate does not prevent the Commission from finding that the existing Tariff is unjust and unreasonable. Section 206 does not require that the Commission simultaneously find a tariff unjust and unreasonable and establish the replacement rate.[76] By the same token, the Commission need not know the exact parameters of the

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[73] Joint Consumer Advocates at 13.

[74] June 2018 Order, 163 FERC ¶ 61,236 at P 150.

[75] *Id*.

[76] *See, e.g.*, *Emera Me. v. FERC*, 854 F.3d 9, 24 (D.C. Cir. 2017) (describing section 206 mandate as a "two-step procedure that requires FERC to make an explicit finding that the existing rate is unlawful before setting a new rate"); *cf.*, *e.g.*, *W. Res., Inc. v. FERC*, 9 F.3d 1568, 1579-80 (D.C. Cir. 1993) (applying the same reasoning under the Natural Gas Act); *Kern River Gas Transmission Co.*, 129 FERC ¶ 61,240 (2009) (finding rates unjust and unreasonable in earlier filing and determining the replacement rate, and effective date of the replacement rate when acting on the compliance filing), *aff'd sub nom. Aera Energy LLC v. FERC*, 789 F.3d 184, 191 (D.C. Cir. 2015).

replacement rate, or exactly how to fix the Tariff, prior to finding the Tariff unjust and unreasonable.[77]

24. While parties assert that the Commission did not explain what constitutes meaningful out-of-market support or define or explain what types of out-of-market support cause price suppression, we disagree. The June 2018 Order points to evidence provided by Calpine and PJM that out-of-market support for resources other than natural gas-fired resources has increased and is projected to further increase in coming years.[78] Further, as discussed below, all out-of-market support gives resources the ability to suppress prices, and therefore we need not list every type of out-of-market support affecting the capacity market.[79] Further, with respect to arguments that the Commission failed to explain how the state programs identified in the June 2018 Order threaten the integrity of the market, while state support in other forms does not, we find that this argument is rendered moot by the December 2019 Order that established the scope of the replacement rate.

### ii. Price Suppression

25. We reject arguments that the June 2018 Order is not based on substantial evidence and deny rehearing on that point. We find that the June 2018 Order is grounded on record evidence and economic theory, and the substantial evidence standard was met.[80]

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[77] *See, e.g., Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,069, at P 38 (2006) (finding CAISO's must offer obligation no longer just and reasonable and establishing paper hearing procedures to determine just and reasonable replacement rate); *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079, at P 1 (2006) (finding that PJM's existing capacity construct is unjust and unreasonable, providing guidance on the establishment of a just and reasonable replacement, and establishing further procedures).

[78] June 2018 Order, 163 FERC ¶ 61,236 at PP 150-152.

[79] *See infra* P 27 & nn.85-88 (listing authorities); *see also* PJM, 2018 Filing, Docket No. ER18-1314-000, at 3-4 (filed Apr. 9, 2018) (stating that the existing Tariff has no means to address increased out-of-market support for certain resources which leads to market harm); PJM, Answer, Docket No. EL16-49-000, at 2 (filed Apr. 11, 2016) (stating that when offers are submitted by a subsidized resource, it is supportable to find the existing Tariff unjust and unreasonable).

[80] Substantial evidence "is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Murray Energy Corp. v. FERC*, 629 F.3d 231, 235 (D.C. Cir. 2011); *see La. Pub. Serv. Comm'n v. FERC*, 522 F.3d 378, 395 (D.C.

The parties argue that the Commission did not cite evidence that particular out-of-market payments are causing price suppression, provide evidence that out-of-market support has eroded investor confidence in market price signals, or quantify the alleged impact of out-of-market support on the capacity markets. Parties assert that if out-of-market support was in fact distorting capacity market prices, there should be evidence of it, particularly because some types of state programs have been in effect since the beginning of the capacity market.[81] These rehearing arguments rest on the faulty assumption that, in order for the Commission to sufficiently support its section 206 finding that PJM's existing Tariff is unjust and unreasonable, the Commission is required to analyze the results of previous capacity auctions and demonstrate that that state subsidies have had a significant price suppressive effect. Rather, to support its section 206 finding, it was appropriate for the Commission to rely on record evidence and basic economic theory to conclude that PJM's existing Tariff does not account for and mitigate the price suppressive impact of state subsidies.

26. As noted above, the Commission relied on the record evidence of out-of-market support that showed that states have enacted programs to provide out-of-market support to resources not covered under the existing PJM MOPR. The June 2018 Order based its finding on those facts and projected growth in out-of-market support,[82] as well as economic reasoning regarding how that out-of-market support produces market distortions. Specifically, the order finds that resources that are able to offer below cost due to out-of-market support will likely do so, thus displacing more economically efficient competitive resources that do not receive similar support.[83] The June 2018 Order thus found that the Tariff is unjust and unreasonable because it does not account for and mitigate these effects.[84]

27. Reviewing courts have repeatedly affirmed the Commission's ability to make judgments based on economic theory, provided the Commission "applie[s] the relevant economic principles in a reasonable manner and adequately explain[s] its reasoning."[85]

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Cir. 2008) (substantial evidence "requires more than a scintilla, but can be satisfied by less than a preponderance of evidence").

[81] *See, e.g.*, Public Power Entities Rehearing Request at 13-14; New Jersey Board Rehearing Request at 6; Illinois Commission Rehearing Request at 7-8.

[82] June 2018 Order, 163 FERC ¶ 61,236 at PP 151-153.

[83] *Id*. PP 153-154.

[84] *Id*. PP 153-155.

[85] *Cent. Hudson Gas & Elec. Corp. v. FERC*, 783 F.3d 92, 109 (2d Cir. 2015) (*Cent. Hudson*); *see, e.g.*, *NextEra Energy Res., LLC v. FERC*, 898 F.3d 14, 23 (D.C. Cir.

As the United States Court of the Appeals for the District of Columbia Circuit has stated, "[p]rice suppression is not a scientific determination, but rather an economic construct. We permit the Commission to base its market predictions on basic economic theory, given that it explained and applied the relevant economic principles in a reasonable manner."[86] Reviewing courts have also recognized that the requirement for the Commission to support its findings with substantial evidence "does not necessarily mean empirical evidence."[87] And, courts typically defer to the Commission's reasoning when the Commission relies on substantial evidence to make "a predictive judgment in an area in which it has expertise, such as power markets."[88]

28. The June 2018 Order comfortably fits within the confines of the foregoing precedent. Acting within its area of expertise, the Commission reasonably applied basic economic principles and adequately explained how out-of-market support to certain resources may permit those resources to offer below their costs in a manner that suppresses the market clearing price. The Commission explained that the record demonstrates that states are increasingly supporting older resources for which a competitive offer may be significantly higher than a price-taker offer would indicate.[89] The June 2018 Order further found that price suppression stemming from state out-of-market support to resources, regardless of type, is indistinguishable from price

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2018) (*NextEra*) (dismissing argument that the Commission did not quantify price suppression resulting from MOPR exemption, deferring to Commission's predictive judgment); *Sacramento Mun. Util. Dist. v. FERC*, 616 F.3d 520, 531 (D.C. Cir. 2010) (*Sacramento Mun. Util. Dist.*) (Commission may make findings "based on 'generic factual predictions' derived from economic research and theory").

[86] *NextEra*, 898 F.3d at 23 (internal quotations and citations omitted).

[87] *S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41, 65, 76 (D.C. Cir. 2014) (*S.C. Pub. Serv. Auth.*) ("[A]t least in circumstances where it would be difficult or even impossible to marshal empirical evidence, the Commission is free to act based upon reasonable predictions rooted in basic economic principles.").

[88] *NextEra*, 898 F.3d at 23 (citing *Wis. Pub. Power Inc. v. FERC*, 493 F.3d 239, 260 (D.C. Cir. 2007)); *see Wis. Pub. Power Inc.*, 493 F.3d at 260-61("It is well-established that an 'agency's predictive judgments about areas that are within the agency's field of discretion and expertise are entitled to *particularly deferential review*, as long as they are reasonable.'") (quoting *Earthlink, Inc. v. FCC*, 462 F.3d 1, 12 (D.C. Cir. 2006)) (emphasis in original).

[89] June 2018 Order, 163 FERC ¶ 61,236 at PP 153-154.

suppression triggered through the exercise of buyer-side market power.[90] It is axiomatic that resources receiving out-of-market subsidies need less revenue from the market than they otherwise would. The rational choice for such resources, given their need to participate in PJM's capacity market, is to reduce their offers commensurably to ensure they clear in the market. In short, subsidized resources can suppress capacity market clearing prices below competitive outcomes by offering below their costs. That economic theory is the precise basis for the existing MOPR rules in the PJM Tariff. The June 2018 Order found that the existing Tariff is unjust and unreasonable because it fails to account for and mitigate these market effects across a broader set of resources.[91] In reaching this determination, it was not necessary for the Commission to demonstrate that subsidized resources have actually suppressed the capacity market clearing price: it is irrefutable that out-of-market subsidies permit and encourage price suppression that injures non-subsidized competitors.[92]

29. The historical existence of subsidy programs does not mean that the Commission is required to demonstrate a particular subsidized resource has offered below cost, or invalidate the Commission's reliance on an economic rationale to support the June 2018 Order's findings.[93] Given the dynamic nature and multiple variables inherent in PJM's multi-state capacity market, it is difficult, if not impossible, to build an evidentiary record

[90] *Id*. P 155.

[91] *Id*. P 150.

[92] *See New England Power Generators Ass'n, Inc. v. FERC*, 757 F.3d 283, 294 (D.C. Cir. 2014) (*NEPGA*) ("capacity offered into the market through below-cost bids can suppress prices even when no actor has the intent to do so"); *NJBPU*, 744 F.3d at 100 (affirming FERC's decision to eliminate the state mandate exemption based on reasoning that "below-cost entry suppresses capacity prices" and that subsidized entry "has the effect of disrupting the competitive price signals"); *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022, at P 141 (2011 PJM MOPR Order) ("The Commission has previously found, and we reiterate here, that uneconomic entry can produce unjust and unreasonable wholesale rates by artificially depressing capacity prices."), *reh'g denied*, 137 FERC ¶ 61,145, at P 3 (2011) (2011 PJM MOPR Rehearing Order), *aff'd sub nom. NJBPU*, 744 F.3d 74; *see also NextEra*, 898 F.3d at 23 (rejecting arguments "that FERC acted unreasonably because it failed to quantify the price suppression resulting from the [MOPR] exemption" at issue in that case, but deferring to the Commission's determination that the level of price suppression permitted by the exemption was acceptable).

[93] *See, e.g.*, Public Power Entities Rehearing Request at 13-14; Dominion Rehearing Request at 8; Illinois Commission Rehearing Request at 7-8; Clean Energy Advocates Rehearing Request at 41-43.

by pinpointing instances of "but for" relatively low offers due specifically to subsidies, and thus the Commission appropriately relied on economic theory.[94] Further, the findings in the June 2018 Order are not based solely on the past participation or impact of subsidized resources. Rather, the June 2018 Order emphasized the significant and continued growth of out-of-market support.[95] As this growth continues, more subsidized resources will have the ability to offer below their costs and suppress prices.[96] The forward nature of the capacity market necessitates that the Commission proactively work to ensure the market is adequately protected against the distortive impacts of state subsidies.[97]

30. Similarly, while the June 2018 Order does not find that any particular capacity auction has produced unjust and unreasonable results, the Commission need not wait to address price distortions from subsidized resources until it finds that the capacity auction has produced unjust and unreasonable results. The Commission is not required to wait until harm has been fully realized to find the Tariff unjust and unreasonable; it can act based on factual predictions supported by economic analysis to prevent harm from impacting the market,[98] which is what the Commission did here.

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[94] *S.C. Pub. Serv. Auth.*, 762 F.3d at 76; *Cent. Hudson*, 783 F.3d at 109.

[95] June 2018 Order, 163 FERC ¶ 61,236 at PP 150-152.

[96] *Id*. PP 150-156.

[97] In any event, we disagree that the existence of long-standing subsidies vitiates the June 2018 Order's finding that subsidies create the ability to distort capacity market prices. Clean Energy Advocates state that prior policy actions would have the same impact on market prices as current ones. Indeed, we acknowledge that out-of-market support in various forms has existed for some time. But, market rules have also previously been adapted to account for these programs. For example, recognizing the impact of state subsidies to natural gas-fired resources, in 2011, the Commission accepted PJM's request to eliminate the state-mandate exemption from the MOPR to ensure that new gas-fired resources offered competitively. 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at PP 139, 141; *see also ISO New England, Inc.*, 135 FERC ¶ 61,029, at P 14 (2011) (2011 ISO-NE MOPR Order); *Consol. Edison Co. of N.Y., Inc. v. N.Y. Indep. Sys. Operator, Inc*., 150 FERC ¶ 61,139, at P 2, *order on reh'g, clarification, & compliance*, 152 FERC ¶ 61,110 (2015).

[98] *S.C. Pub. Serv. Auth*., 762 F.3d at 65 ("Agencies do not need to conduct experiments in order to rely on the prediction that an unsupported stone will fall; nor need they do so for predictions that competition will normally lead to lower prices.") (quoting *Assoc. Gas Distribs. v. FERC*, 824 F.2d 981, 1008-09 (D.C. Cir. 1987)); *see also Sacramento Mun. Util. Dist.*, 616 F.3d at 531 (explaining that no case law "prevents

31. We disagree with the parties who argue that the Commission's reliance on the affidavit by Dr. Giacomoni concerning out-of-market support to certain nuclear, wind, and solar resources is insufficient to find PJM's existing Tariff unjust and unreasonable. These parties argue that this evidence is not sufficient to demonstrate that all out-of-market support leads to below cost offers or that such support impacts clearing prices because the Giacomoni affidavit only describes the increase in out-of-market support and converts state payments into $/MWh quantities, without linking those payments to actual evidence of price suppression.[99] However, as discussed above, the Commission did not rely solely on Dr. Giacomoni's affidavit. It permissibly based its findings on record evidence, including the Giacomoni affidavit and evidence regarding the existence of new state subsidy programs, that out-of-market support is increasing, and the economic prediction that such out-of-market support impacts capacity market prices.[100]

32. The parties further note that Dr. Giacomoni's affidavit states that the size of the subsidy alone does not dictate whether the resource would otherwise be economic and that there may be cases where out-of-market support has little impact on the resource's economics.[101] As explained above, however, it is unquestionable that out-of-market subsidies allow resources to offer lower than they otherwise would and therefore suppress prices. While there may be cases where out-of-market support is so small as to not meaningfully impact a resource's economics, we reiterate that resources in that situation can demonstrate that their offers are competitive through a Competitive Exemption or Unit-Specific Exemption to avoid mitigation, as discussed in the December Order.[102] Further, the statement the parties highlight must be considered in context. Dr. Giacomoni's salient point was that, while subsidies may impact the economics of each resource differently, "it is also quite plausible to conclude that, at these subsidy levels, many resources do depend on those revenues, in combination with PJM market revenues, to be economic."[103]

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the Commission from making findings based on generic factual predictions derived from economic research and theory") (internal quotations omitted).

[99] *See* Exelon Rehearing Request at 13; Public Power Entities Rehearing Request at 13; New Jersey Board Rehearing Request at 5; Clean Energy Associations Rehearing Request at 12.

[100] June 2018 Order, 163 FERC 61,236 at P 151.

[101] *See* Giacomoni Aff. ¶¶ 22, 30, 36.

[102] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 161-162, 214-216.

[103] Giacomoni Aff. ¶ 36.

33. In addition, the affidavit from Adam J. Keech provides data and analyses showing that even the injection of small quantities of subsidized offers would disproportionately reduce the clearing price paid to all resources.[104] He also includes simulated capacity auctions showing that repricing two plants that cannot currently clear at competitive offers to zero dollars would reduce capacity revenues received by every seller in the unconstrained portion of PJM by two percent.[105] This further underscores the link between the magnitude of state programs, which undoubtedly enable resources to bid lower than they otherwise would have, and impacts on the PJM capacity market.

34. We disagree with parties' argument that the Commission should not have extrapolated Dr. Giacomoni's analysis on ZECs to RPS programs.[106] The Commission rested its conclusions regarding subsidies causing price distortions on the economic theory that resources receiving subsidies will be able to offer below their costs. No extrapolation was needed. Further, the June 2018 Order found that "we no longer can assume that there is any substantive difference among the types of resources participating in PJM's capacity market with the benefit of out-of-market support."[107] Parties have not offered any reason why, when offered out-of-market payments, some resources would choose to lower their offers and others would not.

### iii. Contradictory Evidence

35. We affirm the June 2018 Order and deny requests for rehearing that assert that the Commission erred by failing to consider contradictory record evidence. Parties suggest that certain indicia of market health—like new entry and resource development, a high reserve margin, and the recent clearing price—indicate that the PJM capacity market is a robust and well-functioning capacity market under the existing Tariff and thus the Commission erred in finding the Tariff unjust and unreasonable. On the contrary, these arguments do not discredit the validity of the June 2018 Order's findings that subsidies may allow resources to offer lower than they otherwise would, thereby suppressing capacity prices and sending incorrect price signals to investors determining whether to

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[104] Keech Affidavit ¶¶ 6-9 & attach. 1. The Clean Energy Advocates imply that the Keech Affidavit is insufficient evidence of the price-suppressive potential of existing resources because his analysis pertains only to existing nuclear power plants. Clean Energy Advocates Rehearing Request at 47. However, the analyses in Attachment 1 are not resource specific.

[105] *Id*. PP 10-15 & attach. 2.

[106] *See, e.g.*, Clean Energy Associations Rehearing Request at 12 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 152).

[107] June 2018 Order, 163 FERC 62,136 at P 155.

build new generation. As explained above, PJM's capacity market is forward looking, and the current status of the market is not dispositive as to whether the Tariff ensures resource adequacy at just and reasonable rates going forward.[108] Similarly, adequate reserve margins today do not necessarily mean that such conditions will continue into the future. The concern with price suppression is a long-run, not a short-run, concern. In the near term, existing plants with sunk costs will continue to operate. However, uncertainty caused by this price suppression may be expected to discourage competitive new entry in the long run, as investors may be hesitant to invest in a market where both new entry and the viability of uneconomic existing resources is dictated largely by state subsidy programs, rather than competition.[109]

36. Further, regardless of whether the market currently attracts new entry and adequate supply, subsidized resources are still able to offer lower than they otherwise would, including lower than other similarly-situated resources that do not receive subsidies, which may compromise new entry in the future.[110] Competitive, unsubsidized resources may also be driven out of the market by subsidies, lowering reserve margins, or may seek subsidies themselves, further distorting the market.

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[108] Parties point to the Market Monitor's State of the Market reports as evidence that the PJM Market is functioning well. Yet, while noting the results of the capacity market were competitive in 2017, the 2017 State of the Market also explains that "[t]he subsidy model is inconsistent with the PJM market design and inconsistent with the market paradigm and constitutes a significant threat to both" and that subsidies threaten the "competitiveness of PJM markets overall." Monitoring Analytics, LLC, *State of the Market Report-2017*, at 1 (Mar. 8, 2018). In addition, the Market Monitor recommends expanding the MOPR to all existing and new resources "in order to protect competition in the capacity market from external subsidies." *Id.* at 237.

[109] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 150; *see also PJM Interconnection, L.L.C.*, 107 FERC ¶ 61,112, at P 14 (2004) (recognizing that mitigation resulting in lower market prices "conflict[s] with the longer term goal of attracting and retaining necessary infrastructure to assure long-term reliability in such markets").

[110] *See* PJM, April 2018 Filing, Docket No. ER18-1314-000, at 36-37 (filed April 9, 2018) (explaining that new entry has been incentivized by low natural gas prices and improvements in technology leading to more efficient generation and that excess capacity does not justify permitting subsidized resources to set clearing prices).

37. We disagree that evidence showing that the clearing price in the ComEd LDA was higher than the rest of RTO clearing price even with the adoption of the Illinois ZEC program,[111] or that the 2018 capacity auction produced the third highest clearing price to date, shows that subsidies are not capable of suppressing clearing prices. These studies do not show what the clearing price in the ComEd LDA would have been without the subsidy or demonstrate that the price was not suppressed. The June 2018 Order found that subsidized resources would offer below their costs, all other things being equal,[112] and price differentials among auctions do not disprove that finding. Subsidized resources may well be offering below their costs as a result of subsidies, but the price may still increase auction-to-auction due to other factors. Moreover, the June 2018 Order did not base its findings on the fact that prices were currently suppressed. None of the factors cited by parties undermine the record evidence relied upon by the Commission or the well-established economic theory that out-of-market support distorts capacity market prices.[113]

**iv. <u>Effect of Subsidies on Price</u>**

38. We disagree with assertions that evidence suggests that state programs supporting renewable resources should not have a significant effect on capacity prices.[114] As an initial matter, we reiterate that any state-subsidized resource is able to reduce its offer and thus has the ability to impact the supply curve. This impact exists regardless of the degree to which renewable resources participate in the market or whether some RECs are competitively procured; thus, such arguments do not undermine the June 2018 Order. Parties ask the Commission to find that renewable resources warrant special treatment

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[111] *See, e.g.*, Illinois AG Rehearing Request at 7 (citing PJM Interconnection, L.L.C., 2021/2022 Base Residual Auction Results, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx). The rest of RTO clearing price refers to the clearing price for the unconstrained areas in PJM.

[112] June 2018 Order, 163 FERC ¶ 61,236 at PP 2, 153-155.

[113] *See FERC v. Elec. Power Supply Ass'n*, 136 S.Ct. 760, 782 (2016) (Commission need only articulate "a rational connection between the facts found and the choice[s] made") (internal quotations and citation omitted); *Fla. Mun. Power Agency v. FERC*, 315 F.3d 362, 368 (D.C. Cir. 2003) ("The question we must answer . . . is not whether record evidence supports [petitioner's] version of events, but whether it supports FERC's.").

[114] *See, e.g.*, Joint Consumer Advocates Rehearing and Extension Request at 11-12; Clean Energy Advocates Rehearing Request at 38-39, 41-46; Clean Energy Associations Rehearing Request at 13-16; Illinois AG Rehearing Request at 8.

because they may represent a smaller portion of the supply curve than other fuel types, but we disagree that this distinction warrants disparate treatment. As the June 2018 Order found, we no longer can assume that there is any substantive difference among resources participating in PJM's capacity market with the benefit of out-of-market support. If renewable resources can demonstrate that their offers are competitive, they may do so through a Competitive Exemption or Unit-Specific Exemption, as discussed in the December Order, in order to avoid mitigation of their offers.[115]

39. Clean Energy Advocates argue that competition from renewable resources in the energy market may increase capacity market offers from conventional generators that are frequently the marginal resources, presumably by lowering the energy and ancillary services offset to their capacity market revenues. However, even if true, our focus here is on ensuring that the capacity market price is reflective of competitive offers. Further, that point ignores that a relatively higher offer for those conventional generators based on subsidized competition increases the likelihood that those generators will not clear the auction and therefore, will not receive a capacity supply obligation.

40. Clean Energy Advocates also argue that increasing RPS targets do not directly correlate to an increased capacity market participation by state-supported resources, but this argument is beside the point. The June 2018 Order found that, given the increasing out-of-market support provided by states to certain resources, PJM's Tariff was no longer just and reasonable because it failed to protect the market against price distortions caused by these resources. This is true regardless of whether all state RPS targets are fully realized through capacity resources. We further disagree with Clean Energy Advocates' argument that the June 2018 Order failed to address analysis showing that participation of subsidized resources is known well in advance of the auction. Whether market participants are aware of subsidies has nothing to do with the Commission's finding that subsidized resources are themselves able to offer below their costs and therefore distort market outcomes.

41. We also disagree with Joint Consumer Advocates that continued entry and exit in the market demonstrates an ability for the market to absorb subsidized resources without price impacts. As the June 2018 Order explained, subsidies affect which resources enter and exit the market, and, therefore distort the market results.[116] Similarly, we disagree with Joint Consumer Advocates that if the supply curve is becoming more gently sloped, subsidies will not impact capacity prices. A reduction in the slope of the supply curve may mitigate the ability of any one entity to significantly affect the price, but it does not eliminate that ability.

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[115] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 161-162, 214-216.

[116] *See, e.g.*, June 2018 Order, 163 FERC ¶ 61,236 at P 151.

42. With respect to arguments that zero-dollar offers are common and driven by a number of factors, or that new entrants generally submit low offers, we disagree that this is meaningful to our finding. Suppliers may offer as a price-taker for a number of reasons, one of which is subsidies. Similarly, competitive new entrants may currently be offering below Net CONE[117] if they are subsidized or their costs are low, but this does not negate the need for an expanded MOPR going forward. In fact, it underscores the importance of ensuring that all resources are offering competitively such that subsidized new entrants cannot clear the market using an unreasonably low offer and displace more economic, unsubsidized resources. As the June 2018 Order explained and we reiterate here, "there is an important difference between a resource that offers low as a result of competition in the market and one that offers low because a state subsidy gives it the luxury of doing so."[118]

**v. <u>Uncertainty</u>**

43. Parties argue that uncertainty created by out-of-market support is no different than any other uncertainty attendant to the electric industry or uncertainty caused by changing market rules. Public Power Entities also assert that the Commission failed to account for the interests of investors in existing resources who may have relied on the existing MOPR. While we agree with the general premise that any number of factors can cause uncertainty, not all uncertainty renders PJM's Tariff unjust and unreasonable. In balancing competing interests, the Commission is required to ensure that wholesale rates are just and reasonable and to ensure reliability by generating accurate price signals in the long run.[119] Thus, the June 2018 Order reasonably focused on those factors that impair capacity market price signals, including investor uncertainty caused by subsidies. The Commission also considered the countervailing costs to consumers, contrary to Joint Consumer Advocates' suggestion that the Commission failed to balance investor uncertainty interests against those of consumers.[120]

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[117] Net Cost of New Entry (Net CONE) is the nominal levelized cost of a reference resource minus the net energy and ancillary service revenue offset.

[118] June 2018 Order, 163 FERC ¶ 61,236 at P 153.

[119] *See NJBPU*, 744 F.3d at 109 (recognizing the Commission's discretion to balance competing interests).

[120] June 2018 Order, 163 FERC ¶ 61,236 at P 159; *see NJBPU*, 744 F.3d at 97 (quoting *Conn. Dept. of Pub. Util. Control v. FERC*, 569 F.3d 477, 481 (D.C. Cir. 2009) (*Connecticut PUC*)) (finding that states "are free to make their own decisions regarding how to satisfy their capacity needs, but they will appropriately bear the costs of [those] decision[s]") (internal quotations omitted).

### 2. **Economic Justification**

#### a. **Requests for Rehearing and Clarification**

44. Several parties argue that the Commission's justification for finding PJM's existing Tariff unjust and unreasonable is flawed as it does not consider resource attributes that should be compensated and the costs of negative externalities. The Illinois Commission takes issue with the Commission's statement that subsidies make the market "less grounded in fundamental principles of supply and demand,"[121] asserting that PJM's capacity market is not a "free market in the classical sense," but rather an administrative mechanism to achieve resource adequacy. The Illinois Commission argues that the Commission targeted state laws that address consumer demand for environmental and public health needs that PJM's administratively determined demand curve does not consider.[122] The Illinois Commission states that state laws addressing these environmental externalities compensate valuable attributes that would not otherwise be compensated in PJM's markets, and address market failures when the principles of supply and demand do not produce socially optimal results.[123] Exelon and Clean Energy Advocates similarly argue that an efficient market must account for the costs of pollution.[124] Exelon states that the Commission erred in assuming that an efficient market should not be affected by state environmental attribute payments and that offers should be based solely on production costs to be competitive.[125] This is a problem, Exelon insists, because permitting resources to pollute without bearing the pollution costs

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[121] June 2018 Order, 163 FERC ¶ 61,236 at P 2.

[122] Illinois Commission Rehearing Request at 9, 15-16; *see also* Joint Consumer Advocates Rehearing and Extension Request at 19 (if out-of-market support is eliminated, the market will select resources based only on the financial expenditures needed to bring the resource to the market, which ignores environmental externalities).

[123] Illinois Commission Rehearing Request at 9, 12-14.

[124] Exelon Rehearing Request at 2, 4, 5-8; Clean Energy Advocates Rehearing Request at 8, 32-34 ("It is Economics 101 that policies that address market failures *enhance* competition, *increase* efficiency, and result in a *more accurate* reflection of true costs and benefits in market outcomes.") (emphasis in original); *see also* PSEG Rehearing Request at 14 (arguing that thwarting state policies designed to value clean air and fuel diversity "will impose real costs on the citizens of the states that seek to promote them").

[125] Exelon Rehearing Request at 5.

allows these resources to submit bids lower than they should, when bearing the pollution costs might otherwise cause them to exit.[126]

45. Further, the Illinois Commission contends that the Commission mischaracterized state laws, and particularly the Illinois Zero Emission Standard Law, by stating that the capacity market has become "threatened by out-of-market payments provided or required by certain states for the purpose of supporting the entry or continued operation of preferred generation resources."[127] The Illinois Commission opines that the Illinois ZEC legislation's purpose is to achieve state environmental objectives and reduce air pollutants, not arbitrary support for certain generators.[128]

46. Public Power Entities take issue with the June 2018 Order's suggestion that resources are only "economic" if they clear the market without subsidies, and argue that paying resources a capacity price that does not reflect the actual amount of capacity in the market is a form of price support for "economic" resources.[129] Public Power Entities also contend that even if state subsidies permit resources to offer lower than they might otherwise, any downward pressure on clearing prices is appropriate and expected with sufficient supply. If supplies dip, Clean Energy Advocates argue, the market will respond with higher prices, sending a signal to increase supply.[130] "This basic market function will continue to operate even if, hypothetically, a large percentage of capacity resources in the market were to receive state support," Clean Energy Advocates contend.[131] Clean Energy Advocates conclude, therefore, that the presence of state-sponsored capacity would not prevent future new entry, to the extent new entry was necessary for resource adequacy, because the price would simply rise.[132]

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[126] *Id*. at 6-7.

[127] *Id*. at 12 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 1).

[128] *Id*. at 14.

[129] *Id*. at 16-17.

[130] Clean Energy Advocates Rehearing Request at 41.

[131] *Id*.

[132] *Id*.

### b. Commission Determination

47. We disagree with the Illinois Commission that PJM's capacity market is not based on economic supply and demand principles. PJM's capacity market is a competitive market design grounded in the principles of supply and demand. The express purpose of the June 2018 Order is to protect the competitiveness of the market from the influence of out-of-market support and ensure resource adequacy at just and reasonable rates. Regardless of the purpose of out-of-market support, the fact remains that such subsidies are out-of-market payments that allow supported resources to offer below cost and suppress prices. Illinois Commission's argument that the Commission has mischaracterized state laws as being for the purpose of supporting entry or continued operation of preferred generation resources is therefore irrelevant. The intent of the subsidy is immaterial–what matters is that out-of-market payments convey the ability to offer below cost.[133]

48. Parties' arguments that an efficient market would price environmental externalities are not relevant to the findings of the June 2018 Order. The purpose of a capacity market is to ensure resource adequacy at just and reasonable rates, not to mitigate the negative externalities associated with the production of electricity. The Illinois Commission states that the purpose of its ZEC legislation is to promote environmental and clean air goals. Regardless of what laudable intentions may motivate a state to provide subsidies for certain resources, state out-of-market support still has the effect of keeping otherwise uneconomic resources in operation, and supports uneconomic entry of new resources.[134] By reordering the supply curve, this out-of-market support can have significant impacts by suppressing capacity prices and depriving non-subsidized resources of a capacity obligation.

49. We reject Public Power Entities' argument that non-subsidized resources in a competitive market are somehow receiving unjust and unreasonable price support. We reiterate, the Commission has an obligation to ensure just and reasonable rates in the capacity market and has found, as explained herein, that out-of-market support from state policies undermines those rates.[135] It is illogical to suggest that a competitive price outcome is analogous to an out-of-market payment designed to achieve state policy objectives unrelated to the capacity market.

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[133] *See* June 2018 Order, 163 FERC ¶ 61,236 at PP 155, 156.

[134] *Id.* PP 150, 155.

[135] 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 3, *aff'd sub nom. NJBPU*, 744 F.3d at 101; *see infra* n.189.

50. We further disagree with parties who essentially argue that the market will continue to send accurate price signals for entry and exit decisions, even with a large number of subsidized resources. These parties argue that downward pressure on prices as a result of subsidies is consistent with the excess supply. In the long run, subsidies will discourage unsubsidized investment as older, unsubsidized resources retire prematurely. In addition, subsidized existing resources "which should consider retiring based on their costs, are able to displace resources that can meet PJM's capacity needs at a lower overall cost."[136] As the Commission found in the June 2018 Order, these "price distortions compromise the capacity market's integrity" and "create significant uncertainty, which may further compromise the market, because investors cannot predict whether their capital will be competing against resources that are offering into the market based on actual costs or on state subsidies."[137]

### 3. Prior Precedent

#### a. Requests for Rehearing and Clarification

51. Some parties contend that the June 2018 Order did not provide a reasoned explanation for departing from past rulings restricting application of the MOPR to new, natural gas-fired resources.[138] Clean Energy Advocates argue that the Commission mischaracterized prior MOPR precedent in asserting that the Commission has previously recognized that resources receiving out-of-market support are capable of suppressing market prices, regardless of intent.[139] According to Clean Energy Advocates, prior orders in ISO-New England[140] and PJM[141] extending the MOPR beyond mitigating buyer-side

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[136] *Id*. P 154.

[137] June 2018 Order, 163 FERC ¶ 61,236 at P 150.

[138] Public Power Entities Rehearing Request at 10-17; Clean Energy Associations Rehearing Request at 3, 22-25; Clean Energy Advocates Rehearing Request at 26-29; Illinois AG Rehearing Request at 3, 4-5, 11-12.

[139] Clean Energy Advocates Rehearing Request at 26-27 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 155 ("The Commission has previously recognized that resources receiving out-of-market support are capable of suppressing market prices, regardless of intent.")).

[140] 2011 ISO-NE MOPR Order, 135 FERC¶ 61,029 at P 170 (finding that out-of-market support suppresses capacity market prices regardless of intent).

[141] 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 139 (accepting PJM's proposal to eliminate the state-mandate exemption).

market power to reach resources supported by state programs emerged in the context of states pursuing programs that the Supreme Court would ultimately find impermissibly interfered with wholesale market rates.[142] Parties argue that the Commission—at least prior to the CASPR Order,[143] and as recently as 2016 in representations to the D.C. Circuit—affirmed that the MOPR's purpose is to address buyer-side market power and that extending the MOPR based on out-of-market support is a departure from the MOPR's history and purpose.[144]

52. Public Power Entities, Clean Energy Associations, Clean Energy Advocates, and the Illinois AG assert that the Commission did not provide a reasoned explanation for departing from prior precedent exempting state-supported renewable resources from mitigation.[145] In particular, these parties assert that, although the Commission concluded in the June 2018 Order that "we no longer can assume that there is any substantive difference among the types of resources participating in PJM's capacity market with the benefit of out-of-market support,"[146] the June 2018 Order did not explain why its previous reasons[147] for excluding renewable resources from mitigation, specifically their low potential to engage in price suppression and *de minimis* impact on the market, no

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[142] Clean Energy Advocates Rehearing Request at 27-28 (citing *Hughes v. Talen Energy Mktg., LLC*, 136 S.Ct. 1288 (2016) (*Hughes*)).

[143] *ISO New England Inc.*, 162 FERC ¶ 61,205 (2018) (CASPR Order).

[144] Clean Energy Associations Rehearing Request at 23-24; Clean Energy Advocates Rehearing Request at 26-32 (citing the Commission's brief in *NRG Power Mktg., LLC v. FERC*, Nos. 15-1452, 15-1454, 2016 WL 5405117, at *11, *12 (D.C. Cir. Sept. 27, 2016)).

[145] Public Power Entities Rehearing Request at 10-17; Clean Energy Associations Rehearing Request at 3, 22-25; Illinois AG Rehearing Request at 3, 4-5, 11-12; Clean Energy Advocates Rehearing Request at 26-32.

[146] June 2018 Order, 163 FERC ¶ 61,236 at P 155.

[147] Illinois AG Rehearing Request at 11 (asserting that FERC has said that RECs do not pose price-suppressive threats) (citing 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 153); Clean Energy Associations Rehearing Request at 23 (citing *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090, at P 166 (2013) (2013 PJM MOPR Order) (exempting renewable resources because the "MOPR may be focused on those resources that are most likely to raise price suppression concerns"); *N.Y. Pub. Serv. Comm'n v. N.Y. Indep. Sys. Operator*, 153 FERC ¶ 61,022, at PP 2, 47 (2015) (exempting renewable resources from MOPR that have "limited or no incentive and ability to exercise buyer-side market power")).

longer hold true.[148] Clean Energy Advocates argue that the Commission must be particularly careful to explain its departure from prior precedent exempting renewable resources from market mitigation given the reliance interests on this exemption engendered over the years.[149]

53. Public Power Entities argue that the Commission has not explained its departure from its prior rationale that a competitive offer from an existing resource would typically be low regardless of subsidies because, once built, a resource's incremental costs of taking on a capacity obligation can approximate zero.[150] Rejecting the Commission's rationale that out-of-market support could suppress offer prices of older resources that may have higher going-forward costs, Public Power Entities argue that it is not the purpose of the MOPR to adjust every resource's offer to match their exact costs.[151] Finally, Public Power Entities argue the Commission did not substantiate its claim that circumstances have changed because the Commission does not explain how the growth of out-of-market programs referenced in the June 2018 Order renders the Tariff unjust and unreasonable, as opposed to other out-of-market support pervading the industry.[152]

54. The Illinois AG suggests that the June 2018 Order frustrates all six "first principles" of capacity markets enunciated in the CASPR order and that the Commission

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[148] Clean Energy Associations Rehearing Request at 23-24; Clean Energy Advocates Rehearing Request at 26-32 (citing 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 153 ("[W]ind and solar resources are a poor choice if a developer's primary purpose is to suppress capacity market prices. Due to the intermittent energy output of wind and solar resources, the capacity value of these resources is only a fraction of the nameplate capacity. This means that wind and solar resources would need to offer as much as eight times the nameplate capacity of a CT or CC resource in order to achieve the same price suppression effect.")); 2013 PJM MOPR Order, 143 FERC ¶ 61,090 at P 166 (rejecting arguments that the MOPR should apply to all resource types, agreeing "that the MOPR may be focused on those resources that are most likely to raise price suppression concerns").

[149] Clean Energy Advocates Rehearing Request at 19 (citing *Encino Motorcars, LLC v. Navarro*, 136 S.Ct. 2117, 2126 (2016); *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (*Fox Television Stations*)).

[150] Public Power Entities Rehearing Request at 5; *see also* Joint Consumer Advocates Rehearing and Extension Request at 11-12; Maryland Commission Rehearing Request at 16.

[151] Public Power Entities Rehearing Request at 16.

[152] *Id.* at 10-11, 15-17.

did not explain its departure from these principles, arguing that the Commission's proposed replacement rate will not facilitate competition, send clear price signals, result in least-cost resources possessing attributes sought by the market, or support price transparency, and will unfairly shift risk from investors to consumers and exacerbate existing market power.[153]

**b. Commission Determination**

55. We disagree with parties that the June 2018 Order contradicts, or is an unexplained departure from, prior precedent. Although the Commission has stated in the past that the MOPR is used to prevent the exercise of buyer-side market power, a purpose of the MOPR is to address price suppression that renders capacity market prices unjust and unreasonable.[154] Consistent with that policy, in 2011, the Commission accepted PJM's proposal to eliminate the state-mandate exemption from the MOPR, finding that state-supported uneconomic entry can produce unjust and unreasonable rates by artificially suppressing capacity prices.[155] Thus, the Commission previously has recognized that the MOPR is intended to address price suppression by ensuring resources offer competitively. The Commission's PJM MOPR precedent shows that the MOPR has evolved in scope out of necessity in light of changed circumstances.[156]

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[153] Illinois AG Rehearing Request at 9-11 (citing *ISO New England Inc.*, 162 FERC ¶ 61,205 (2018).

[154] *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at P 34 (2006) (explaining that the MOPR would apply to sellers that "may have incentives to depress market clearing prices below competitive levels").

[155] 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 141, *aff'd sub. nom. NJBPU* 744 F.3d at 97-102; *see also* CASPR Order, 162 FERC ¶ 61,205 at P 22 (using the MOPR to mitigate impacts of state policies on the wholesale capacity market); 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at P 14 (recognizing that out-of-market support suppresses capacity market prices).

[156] June 2018 Order, 163 FERC ¶ 61,236 at P 150 n.276; December 2019 Order, 169 FERC ¶ 61,239 at P 39. As Clean Energy Advocates aptly point out, prior orders discussing application of the MOPR to address out-of-market support responded to state actions to subsidize certain resources. *See NJBPU*, 744 F.3d at 87-88, 100 (finding that the Commission reasonably explained its decision to eliminate the state-mandate exemption); 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 139. Growing out-of-market support is an explicit basis for the June 2018 Order's finding. It is inconsequential that previous out-of-market support was found federally preempted

56. Although parties point out that the Commission previously found that renewable resources do not warrant mitigation, the record in this proceeding demonstrates that circumstances have changed. Evolution of the Commission's policy is justified in response to the proliferation of out-of-market support to resources that permit these resources to offer non-competitively and suppress prices.[157] Even though the Commission previously found that renewable resources are not the most "efficient resources to suppress capacity prices,"[158] due to the intermittent energy output of wind and solar resources,[159] the Commission has not found that renewable resources are incapable of suppressing price. Rather, out-of-market support gives renewable resources the ability to suppress capacity prices because the out-of-market support means a resource can offer below its costs. This is true even if a resource has low capacity thresholds because, on aggregate, small subsidized resources can influence the clearing price. Thus, the June 2018 Order concludes that, given the proliferation in state subsidies, price suppression stemming from state choices to support certain resources or resource types is indistinguishable from price suppression triggered through the potential exercise of buyer-side market power and should therefore be addressed similarly, thus requiring the Commission to act to ensure that rates for capacity in PJM remain just and reasonable.[160]

57. We agree with Public Power Entities that an offer for an existing capacity resource would typically be low, but we disagree that the Commission erred in concluding that this may not always be true. Rather, the June 2018 Order squarely acknowledges that fact

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because the economic principle that out-of-market support distorts capacity market prices remains true whether or not the state action is preempted.

[157] *See ANR Pipeline Co. v. FERC*, 205 F.3d 403, 407 (D.C. Cir. 2000) (*ANR Pipeline Co*) (affirming Commission policy change when the Commission explains "how changed circumstances justified a new policy").

[158] 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 153.

[159] *Id*.

[160] June 2018 Order, 163 FERC ¶ 61,236 at P 155. Notably, under the existing MOPR, prior state subsidies of concern targeted new natural gas-fired resources. *See Hughes*, 136 S. Ct. at 1294 (describing how "Maryland solicited proposals from various companies for construction of a new gas-fired power plant"); *NJBPU,* 744 F.3d at 99 ("New Jersey Petitioners claim that the new, gas-fired resources it seeks to build are needed to address New Jersey's capacity deficiency . . . .").

and the relevant precedent.[161] The June 2018 Order then explains why the Commission no longer believes that the fact that a competitive offer for an existing resource would typically be low is a sufficient reason to exempt *all* existing resources from the MOPR. Specifically, the June 2018 Order notes that not all existing resources have low going forward costs. Older, uneconomic existing resources in PJM are increasingly receiving out-of-market support to allow them to remain in the market. The June 2018 Order expressly addresses this concern, finding that the Tariff is unjust and unreasonable because it does not account for out-of-market support for these resources.[162] Thus, the changed circumstances described in the June 2018 Order warrant the expansion of the MOPR to existing and non-natural gas-fired new resources. This shift is within the Commission's discretion in light of the changed market conditions.[163]

58. While we agree with Public Power Entities that the purpose of the MOPR is not to adjust every resource's offer to match its exact costs, the June 2018 Order did not find that to be the standard. Rather, the June 2018 Order preliminarily found that an expanded MOPR "should protect PJM's capacity market from the price suppressive effects of resources receiving out-of-market support by ensuring that such resources are not able to offer below a competitive price."[164] The June 2018 Order, therefore, clearly contemplated the MOPR only applying a price floor to the offers of resources receiving out-of-market support.

59. We deny the Illinois AG's rehearing request that the June 2018 Order's discussion of the replacement is inconsistent with the capacity market principles set forth in the CASPR Order. Because the replacement rate was not determined in the June 2018 Order, how the MOPR will work in PJM had not yet been determined, making that argument

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[161] June 2018 Order, 163 FERC ¶ 61,236 at P 153 & n.285 ("We recognize that the Commission has previously declined to extend the MOPR to existing resources, finding that a competitive offer for an existing resource would 'typically be very low, and often close to zero—regardless of whether the resource receives any out-of-market payments.'") (quoting 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 132) (citing *N.Y. Indep. Sys. Operator, Inc.*, 122 FERC ¶ 61,211, at P 118, *order on reh'g*, 124 FERC ¶ 61,301 (2008), *order on reh'g*, 131 FERC ¶ 61,170 (2010), *order on reh'g*, 150 FERC ¶ 61,208 (2015)).

[162] June 2018 Order, 163 FERC ¶ 61,236 at PP 153-154.

[163] *See La. Pub. Serv. Comm'n v. FERC*, 772 F.3d 1297, 1303 (D.C. Cir. 2014) ("The Commission can depart from a prior policy or line of precedent, but it must acknowledge that it is doing so and provide a reasoned explanation.") (citing *Fox Television Stations*, 556 U.S. at 515); *ANR Pipeline Co*, 205 F.3d at 407.

[164] June 2018 Order, 163 FERC ¶ 61,236 at P 158.

premature.[165] We also disagree with Public Power Entities' argument that the Commission does not offer a reasoned explanation for its conclusion that ZECs and RPS programs render the Tariff unjust and unreasonable, when other types of out-of-market support do not. The June 2018 Order makes no such finding. Rather, the June 2018 Order found that out-of-market support in general renders the Tariff unjust and unreasonable.[166]

### 4. State Jurisdiction

#### a. Requests for Rehearing and Clarification

60. Multiple parties argue that the Commission improperly intruded into the states' traditional jurisdiction over generation and resource portfolio decisions and violated principles of cooperative federalism.[167] The Maryland Commission states that section 201 of the FPA limits the Commission's authority to the transmission and wholesale sale of electric energy in interstate commerce, and expressly excludes matters that are the subject of state regulations, such as "facilities used for the generation of electric energy or over facilities used in local distribution or only for the transmission of electric energy in intrastate commerce."[168] Parties assert that courts have recognized states' authority over generation matters and decisions concerning fuel types,[169] and that states may pursue

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[165] Also, the Commission has recognized that each RTO/ISO is different and that its market rules may therefore be different. *See* December 2019 Order, 169 FERC ¶ 61,239 at P 204 n.431 (explaining "regional markets are not required to have the same rules. Our determination about what rules may be just and reasonable for a particular market depends on the relevant facts."); *Midcontinent Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,176, at P 57 & n.133 (2018) (listing cases that reject the "one-size-fits-all-approach").

[166] *Id*. P 150.

[167] Maryland Commission Rehearing Request at 2-3, 4-14; Illinois Commission Rehearing Request at 3, 11-12; Dominion Rehearing and Clarification Request at 6-7, 13-15; New Jersey Board Rehearing Request at 2, 6-8; PSEG Rehearing Request at 3-5, 11-15; Clean Energy Associations Rehearing Request at 3, 25-27; Joint Consumer Advocates Rehearing and Extension Request at 3, 14-21; Illinois AG Rehearing Request at 3, 5, 12; Clean Energy Advocates Rehearing Request at 8, 48-51.

[168] Maryland Commission Rehearing Request at 4-5 (citing 16 U.S.C. §§ 824(a), (b)(1)); *see also* PSEG Rehearing Request at 11-12.

[169] Maryland Commission Rehearing Request at 5-6 (citing *N.Y. v. FERC*, 535 U.S. 1, 22 (2002) ("[T]he legislative history [of the FPA] is replete with statements describing Congress' intent to preserve state jurisdiction over local [generation]

measures to encourage the development of clean generation or other public policy goals.[170]

61. Further, the Maryland Commission argues that the Commission has recognized that it lacks jurisdiction over sales of state-issued RECs that are not bundled with wholesale energy because an unbundled REC transaction does not affect wholesale electricity rates, and failed in the June 2018 Order to explain its departure from this precedent.[171] Similarly, Joint Consumer Advocates and the New Jersey Board argue that the Commission conceded in its amicus brief in *Village of Old Mill Creek v. Star* that state programs such as RECs and ZECs are within the states' jurisdiction.[172] The parties argue that this concession is inconsistent with the June 2018 Order, which the parties claim exercised the Commission's authority over wholesale rates in a way that will effectively force resources participating in these state programs out of the capacity markets, without first making the requisite showing that these programs affect the wholesale electricity market or abrogate a Commission-mandated rate.[173]

62. Parties further argue that by extending the MOPR to resources receiving out-of-market payments, including renewable resources, the June 2018 Order undermines the

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facilities."); *Connecticut PUC*, 569 F.3d at 481 ("State and municipal authorities retain the right to forbid new entrants from providing capacity, to require retirement of existing generators, to limit new construction to more expensive, environmentally friendly units, or to take any other action . . . without direct interference from the Commission.").

[170] Illinois Commission Rehearing Request at 12 (citing *Hughes*, 136 S.Ct. at 1292 ("Nothing in this opinion should be read to foreclose [states] from encouraging production of new or clean generation through measures untethered to a generator's wholesale market participation.") (internal quotations omitted).

[171] Maryland Commission Rehearing Request at 8-10 (arguing that the June 2018 Order's assertion that out-of-market payments interfere with wholesale market signals departs from the Commission's statement in WSPP that unbundled REC transactions do not affect wholesale rates) (citing *WSPP Inc.*, 139 FERC ¶ 61,061, at P 18 (2012)).

[172] *See* Joint Consumer Advocates Rehearing and Extension Request at 17-18, 20 (citing Brief at 10, REC and ZEC programs are "not payments for, or otherwise bundled with, sales of energy or capacity at wholesale"); New Jersey Board Rehearing Request at 7-8 (citing *Vill. of Old Mill Creek v. Star*, 2017 WL 3008289 (N.D. Ill. July 14, 2017) and *Coal. for Competitive Elec. v. Zibelman*, 272 F.Supp.3d 554 (S.D.N.Y. 2017)).

[173] Maryland Commission Rehearing Request at 8-10; NJ Board Rehearing Request at 8; Joint Consumer Advocates Rehearing and Extension Request at 16-18.

value the states place on environmental attributes.[174] Moreover, Clean Energy Advocates argue that the Commission's statement that states can still accomplish their environmental goals by making customers pay more for capacity is incorrect because states will still have to buy extra, unnecessary capacity from polluting resources as a consequence of supporting clean resources; and, even if true, the Commission ignores the fact that imposing unnecessary capacity costs on customers violates the duty to ensure just and reasonable rates.[175] Clean Energy Associations contend that while the Commission has jurisdiction to regulate certain parameters that directly impact how the capacity price is set, even if those determinations touch on state authority, the court made clear in *Connecticut PUC* that federal regulation of capacity market prices does not negate states' authority to decide what types of generation facilities or other technologies are built to serve their customers.[176] Clean Energy Associations continue that the June 2018 Order conflicts with the court's directive in *Connecticut PUC* by directing mitigation rules to block state-supported generation resources from the capacity market and erecting a barrier for states to develop resources.[177]

63. These parties argue that the June 2018 Order's intrusion on matters left to the state was not justified. The Illinois Commission contends that the Supremacy Clause prohibits the Commission from using the June 2018 Order to work around state laws that do not seek to impermissibly intrude in the wholesale electricity market or abrogate a Commission mandated rate.[178] Arguing that there is a strong presumption against finding that the FPA supersedes powers traditionally exercised by the states, parties insist that the June 2018 Order lacked record evidence to conclude that state policies intrude on the

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[174] Maryland Commission Rehearing Request at 3, 7-8; Dominion Rehearing and Clarification Request at 14-15 (June 2018 Order will prevent supported resources from participating in the capacity market, effectively handicapping state policy subsidies at the behest of the voters); Clean Energy Associations Rehearing Request at 26-27 (Commission is exercising its wholesale rate authority in a manner that targets states' exclusive jurisdiction and effectively forces resources participating in state programs out of the market); Clean Energy Advocates Rehearing Request at 49-50 (the June 2018 Order frustrates the decisions of state environmental regulators); Illinois AG Rehearing Request at 12.

[175] Clean Energy Advocates Rehearing Request at 50-51.

[176] Clean Energy Associations Rehearing Request at 27 (citing *Connecticut PUC*, 569 F.3d at 482-83).

[177] *Id*.

[178] Illinois Commission Rehearing Request at 11.

Commission's authority over wholesale rates.[179] According to the Maryland Commission, the Commission errs in conflating RECs, which represent a state-authorized premium for emissions-free generation, with megawatts, when in fact RECs are traded outside the capacity market and are not intended to suppress wholesale prices.[180]

64. The end result of the June 2018 Order, parties contend, will be to require states' customers to pay twice for capacity, through both the state subsidy promoting the renewable resource and through PJM's capacity market, which effectively would ignore those resources and require procurement of redundant capacity.[181] Moreover, the Maryland Commission contends that it is not clear that the FRR Alternative will address this issue.[182]

65. PSEG states that the Commission should incorporate state public policy goals, such as carbon abatement and resiliency, into its market designs, consistent with cooperative federalism.[183]

### b. <u>Commission Determination</u>

66. We deny rehearing requests that argue that the Commission improperly intruded into the states' traditional jurisdiction over generation, violating principles of cooperative

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[179] Joint Consumer Advocates Rehearing and Extension Request at 16 (citing *Niagara Mohawk Power Corp. v. Hudson River-Black River Regulating Dist.*, 673 F.3d 84, 94 (2d Cir. 2012)); Dominion Rehearing and Clarification Request at 14-15 (asserting that the Commission must accommodate state regulation unless doing so would clearly damage federal goals); New Jersey Board Rehearing Request at 8 (the June 2018 Order made no legal determination that the state policies in question impermissibly intrude on matters reserved for federal oversight); Clean Energy Associations Rehearing Request at 25.

[180] Maryland Commission Rehearing Request at 3, 10-13.

[181] Maryland Rehearing Request at 13-14; Clean Energy Associations Rehearing Request at 26 (if these resources do not receive a reasonable opportunity to clear in the capacity market and have their capacity recognized, load-serving entities will have to purchase additional unneeded capacity).

[182] Maryland Commission Rehearing Request at 14.

[183] PSEG Rehearing Request at 3-5, 12-15 (arguing that rather than frustrating state policies, the Commission should be trying to accommodate and give effect to those policies).

federalism, because the Tariff failed to account for out-of-market support..[184] The Commission explained in the June 2018 Order that state out-of-market payments, including RECs and ZECs, give resources the ability to make capacity market offers below costs, suppressing capacity prices.[185] Because these programs disrupt competitive price signals that PJM's capacity auction is designed to produce, we are obligated to act to deter uneconomic participation.[186] The Commission does not improperly intrude on the states' prerogatives to determine its energy resource mix and the development of new generation merely because the wholesale rules affect matters within the states' jurisdiction.[187] As we stated in the June 2018 Order, expanding PJM's MOPR "in no way divests the states in the PJM region of their jurisdiction over generation facilities,"[188] or prevent states from supporting preferred generation resources.[189] The Commission

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[184] *See NJBPU*, 744 F.3d at 96 (upholding the Commission's jurisdiction to eliminate the state mandate exemption, which would have permitted states to introduce thousands of megawatts of new capacity into the capacity auction, because state subsidized generation would affect wholesale capacity prices).

[185] June 2018 Order, 163 FERC ¶ 61,236 at PP 150-156; *see also* Keech Aff. ¶¶ 10-13, 15; *see also supra* section A.1.b (elaborating on how state actions impact the capacity market).

[186] *See* 16 U.S.C. §§ 824, 824d, 824e; 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 3 ; 2011 PJM MOPR Order, 135 FERC ¶ 61,022 at P 143 ("While the Commission acknowledges the rights of states to pursue legitimate policy interests, and while, as we have said, any state is free to seek an exemption from the MOPR under section 206, it is our duty under the FPA to ensure just and reasonable rates in wholesale markets. . . . Because below-cost entry suppresses capacity prices, and because the Commission has exclusive jurisdiction over wholesale rates, the deterrence of uneconomic entry falls within the Commission's jurisdiction, and we are statutorily mandated to protect the [capacity market] against the effects of such entry."), *quoted with approval in NJBPU*, 744 F.3d at 100, *cited in Hughes*, 136 S.Ct. at 1296.

[187] *See, e.g.*, *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760, 776 (2016) ("When FERC sets a wholesale rate, when it changes wholesale market rules, when it allocates electricity as between wholesale purchasers—in short, when it takes virtually any action respecting wholesale transactions—it has some effect . . . on retail rates. That is of no legal consequence.").

[188] June 2018 Order, 163 FERC ¶ 61,236 at P 158.

[189] 2011 PJM MOPR Rehearing Order, 137 FERC ¶ 61,145, at P 3 ("Our intent is not to pass judgment on state and local policies and objectives with regard to the development of new capacity resources, or unreasonably interfere with those objectives.

recognizes that the FPA reserves to the states decisions concerning generation; but the FPA provides the Commission with the jurisdiction and authority to regulate rates for wholesale sales by those generation resources and we are obligated to ensure that such rates are just and reasonable and not unduly discriminatory. Moreover, contrary to Clean Energy Advocates' argument, courts have affirmed Commission decisions resulting in customers having to pay twice for state-preferred capacity.[190]

67. The facts that the FPA may not preempt state programs such as the Illinois ZEC program,[191] that RECs may not be intended to suppress wholesale rates, or that the Commission does not have jurisdiction over unbundled REC transactions[192] and ZEC programs, do not diminish the Commission's obligation under the FPA to ensure that

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We are forced to act, however, when subsidized entry supported by one state's or locality's policies has the effect of disrupting the competitive price signals that PJM's [capacity auction] is designed to produce, and that PJM as a whole, including other states, rely on to attract sufficient capacity."), *quoted with approval in NJBPU*, 744 F.3d at 101, *quoted with approval in Hughes*, 136 S. Ct. at 1296. This determination also comports with precedent in other regional markets. *See, e.g.*, CASPR Order, 162 FERC ¶ 61,205 at P 21 & n.32; 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at P 170, *reh'g denied*, 138 FERC ¶ 61,027 (2012), *aff'd sub nom. NEPGA*, 757 F.3d at 293-95 ; *Connecticut PUC*, 569 F.3d at 481, *adopted in NJBPU*, 744 F.3d at 96-97.

[190] *See NEPGA*, 757 F.3d at 294-95; *NJBPU*, 744 F.3d at 98; *Connecticut PUC*, 569 F.3d at 481.

[191] *Elec. Power Supply Ass'n v. Star*, 904 F.3d 518 (7th Cir. 2018) (*EPSA v. Star*) (affirming that Illinois' ZECs program is not preempted by the FPA), *cert. denied*, 139 S.Ct. 1547 (2019).

[192] Contrary to the Maryland Commission's argument, the June 2018 Order did not assert authority over unbundled REC transactions, or any other state out-of-market payments. Rather, the Commission determined that such forms of out-of-market support may permit and encourage state-preferred resources to make uneconomic offers into the capacity market and thereby unreasonably suppress the price paid to competitive resources that do not enjoy such out-of-market support. *See* June 2018 Order, 163 FERC ¶ 61,236 at PP 150-156. The Commission does not usurp state jurisdiction to engage in out-of-market support for preferred resources when the Commission regulates the impact of those state policies on wholesale capacity rates. *See Connecticut PUC*, 569 F.3d at 481-83. If REC revenues are claimed to provide the justification for a lower capacity market offer, then those revenues will directly affect wholesale capacity prices and can no longer be characterized as "independent" from jurisdictional wholesale sales. *WSPP Inc.*, 139 FERC ¶ 61,061 at P 24.

wholesale rates are just and reasonable and not unduly discriminatory or preferential.[193] In discussing ZEC programs, the Seventh Circuit recently confirmed that, to the extent state efforts to support certain resource types in pursuit of state policy goals affects interstate sales, which is "an inevitable consequence of a system in which power is shared between state and national governments," the Commission may make adjustments based on those effects.[194]

### 5. Undue Discrimination

#### a. Requests for Rehearing and Clarification

68. Public Power Entities state that the Commission found PJM's Tariff unjust, unreasonable, and unduly discriminatory, but argue that the June 2018 Order did not elaborate on how the existing Tariff, under which only new natural gas-fired resources are subject to the MOPR, should be deemed unduly discriminatory. Pointing to the Commission's findings with regard to Capacity Repricing as potential support for the undue discrimination finding, Public Power Entities argue that, to the extent the Commission means to suggest that failing to apply the MOPR to resources that receive out-of-market support unduly discriminates against those not receiving out-of-market payments, the June 2018 Order does not sufficiently support a general proposition that the receipt of subsidies justifies different ratemaking treatment because the June 2018 Order does not show that subsidies have a "material effect on price."[195]

#### b. Commission Determination

69. We deny Public Power Entities' rehearing request that the Commission acted arbitrarily and capriciously because it did not elaborate on why the existing Tariff should be deemed unduly discriminatory. Though the Commission stated in making its determinations that PJM's then existing Tariff was "unjust and unreasonable and unduly

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[193] *See EPSA v. Star*, 904 F.3d at 524. The rehearing petitions are, in effect, making an unwarranted reverse preemption argument by contending that since the FPA does not preempt a state program, the state program preempts the Commission's jurisdiction over the wholesale market. This is simply not how federal preemption law works.

[194] *Id*. The court specifically pointed to the June 2018 Order and explained that, rather than deeming state programs such as the ZEC program preempted, the Commission in the June 2018 Order "has taken them as givens and set out to make the best of the situation they produce." *Id*.

[195] Public Power Entities Request for Rehearing at 17-19 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 68).

discriminatory,"[196] we clarify here that the Commission need not make an explicit and separate undue discrimination determination if it finds and explains why the Tariff is unjust and unreasonable, which the Commission did in this proceeding. Thus, elaboration on why the Tariff is unduly discriminatory was not required to support the Commission's action here.[197] Further, as laid out in the June 2018 Order, and herein, the Commission explained why new and existing resources receiving out-of-market support require mitigation while resources not receiving out-of-market support do not, including why such out-of-market support causes price distortions in the capacity market, which affect market outcomes for all market participants, including suppressing the prices paid to non-subsidized resources.[198] Moreover, the assertion that the Commission's finding was not sufficiently supported with evidence of a "material effect on price" merely repackages arguments, which we have already rejected above, that the Commission lacked sufficient evidence to find that the then-existing MOPR was unjust and unreasonable.

### 6. Procedural Schedule

#### a. Requests for Rehearing and Clarification

70. A number of parties seek rehearing of the procedural schedule set forth in the June 2018 Order for the paper hearing to determine the replacement rate. Clean Energy Associations argue that the Commission's finding that the existing Tariff is unjust and unreasonable forces the Commission to rush to judgment on a replacement rate that can

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[196] June 2018 Order, 163 FERC ¶ 61,236 at PP 150, 156.

[197] 16 U.S.C. § 824e(a) ("Whenever the Commission . . . shall find that any rate . . . by any public utility for any transmission or sale subject to the jurisdiction of the Commission, . . . is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate . . . ."); *see, e.g.*, *Cities of Bethany v. FERC*, 727 F.2d 1131, 1143 (D.C. Cir. 1984) (explaining that under section 206, "FERC itself may establish the just and reasonable rate, provided that it first determines that a rate set by a public utility is unjust, unreasonable, or unduly discriminatory.").

[198] June 2018 Order, 163 FERC ¶ 61,236 at PP 150-156. Some resources receive state subsidies favoring particular types of resources, such as renewables under RPS programs or nuclear resources through ZECs, other resources do not receive state subsides. This causes the capacity market not only to produce unjust and unreasonable rates, but also produces unduly preferential rates by allowing subsidized resources to distort the market to their benefit while unduly discriminating against non-subsidized resources.

be implemented by the next annual capacity auction.[199] To remedy this, Clean Energy Associations contend that the Commission should withdraw this finding, or, at a minimum, adjust the procedures to ensure notice of the actual proposed replacement rate and comment prior to adopting the just and reasonable replacement rate going forward.[200] Providing notice and an opportunity to comment on the proposed replacement rate prior to its implementation is important, allege Clean Energy Associations, because the Commission's rehearing rules of practice prohibit providing additional evidence when the evidence was available at the time of initial filings or raising issues for the first time on rehearing. Clean Energy Associations believe these rules would foreclose seeking rehearing of issues regarding that become apparent only when the specifics of the replacement rate are known.[201]

71. Joint Consumer Advocates compare the procedural schedule in the June 2018 Order, requiring initial comments within 60 days, to that in other significant market change proceedings in which the Commission has provided between 75 and 90 days for the submission of initial comments.[202] Joint Consumer Advocates assert that this proceeding is similar in significance to a rulemaking, for which the Administrative Procedure Act (APA) requires a minimum of 60 days for public comment and, Executive Order No. 12,866, addressing agency rulemakings, recommends 180 days or more for significant regulatory actions.[203] The compressed procedural timeline is unnecessary,

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[199] Clean Energy Associations Rehearing Request at 4, 9-10.

[200] *Id*. (stating, among other things, that a typical section 206 proceeding involves a filed proposed replacement rate with notice and a full comment opportunity on the proposed replacement rate prior to implementation); *see also* Clean Energy Advocates Rehearing Request at 54; Illinois Commission Rehearing Request at 4, 21-24 (the Commission should have determined the just and reasonable replacement rate, rather than providing vague directions with an unreasonable timeframe).

[201] Clean Energy Associations Rehearing Request at 8-9.

[202] Joint Consumer Advocates Rehearing and Extension Request at 25 (citing *Centralized Capacity Mkts. in Reg'l Transmission Org. & Indep. Sys. Operators*, 149 FERC ¶ 61,145 (2014); *Price Formation in Energy & Ancillary Servs. Mkts. Operated by Reg'l Transmission Org. & Indep. Sys. Operators,* 153 FERC ¶ 61,221 (2015)).

[203] *Id*. at 25-26 (citing Executive Order No. 12,866, *Regulatory Planning & Review*, 58 Fed. Reg. 51,735 (Sept. 30, 1993)).

Joint Consumer Advocates contend, because evidence suggests that PJM's capacity market is robust and not in need to immediate reform.[204]

72. Parties argue that the procedural timeline is overly aggressive and limits the ability of the parties and the Commission to thoughtfully consider sweeping changes.[205] The Maryland Commission and New Jersey Board state that the timeline will limit the ability for states to meaningfully participate in the process and hamper state commissions who are involved in other overlapping PJM matters.[206] Public Power Entities argue that the compressed paper hearing schedule threatens to frustrate achieving a workable resource adequacy construct by requiring stakeholders to address complex issues without the time needed to develop a full record and make effective use of the stakeholder process.[207] Further, parties argue that because state RPS programs require legislative change, they could not be implemented in response to an FRR Alternative within the June 2018 Order's timeframe, which does not provide an adequate transition mechanism to ensure that states can align their policies to a new capacity market construct.[208]

73. Parties argue that the paper hearing schedule violates due process because it does not provide parties a "realistic opportunity" to respond to the Commission's directive.[209] Pointing to the scope and volume of open questions to be explored during the paper

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[204] *Id*; *see also* Maryland Commission Rehearing Request at 22.

[205] New Jersey Board Rehearing Request at 2, 8-10; *see also* Clean Energy Associations Rehearing Request at 3-10; Joint Consumer Advocates Rehearing Request and Extension Request at 2, 4, 21-27; Illinois AG Rehearing Request at 3, 5, 14-17; PJM-ICC Rehearing and Clarification Request at 21-22; Illinois Commission Rehearing Request at 21-23.

[206] New Jersey Board Rehearing Request at 10-12; Maryland Commission Rehearing Request at 22-23.

[207] Public Power Entities Rehearing Request at 8, 23-24.

[208] Joint Consumer Advocates at 27; *see also* Maryland Commission Rehearing Request at 22-23 (stating that if an FRR Alternative is approved, it will effectively not be available to states should the replacement rate be in place for the May 2019 Base Residual Auction because states will not have enough time to enact new legislation between January 2019 and May 2019); Illinois Commission Rehearing Request at 23-24.

[209] Maryland Commission Rehearing Request at 19-23; *see also* Clean Energy Associations Rehearing Request at 4, 6 (the APA requires adequate notice and an opportunity to be heard).

hearing, parties contend that more time for consideration is warranted.[210] Joint Consumer Advocates emphasize that the replacement rate outlined in the June 2018 Order will require detailed consideration, as the FRR Alternative was raised by one entity in the stakeholder process and not discussed thoroughly by stakeholders, and that PJM has never instituted as broad a MOPR as proposed in the June 2018 Order.[211]

74. Joint Consumer Advocates assert that the paper hearing schedule "eviscerates the due process protections" embodied in the PJM stakeholder process, noting that stakeholders have invested considerable time and effort into these issues.[212] Joint Consumer Advocates argue that, after finding PJM's proposals unjust and unreasonable, the Commission should have returned the issues to the stakeholders with limited guidance, rather than foisting an under-developed concept upon them with little time to consider alternatives.[213] Joint Consumer Advocates state that by declaring PJM's Tariff unjust and unreasonable, the June 2018 Order prohibits *ex parte* communications with stakeholders, preventing constructive dialogue on the replacement rate.[214] If the Commission does not grant its request for rehearing of the June 2018 Order, Joint Consumer Advocates request that the Commission grant a six month extension of time and require PJM to reconvene a stakeholder process with guidance from the Commission to develop a capacity market construct that meets stakeholder needs.[215]

### b. **Commission Determination**

75. We deny parties' rehearing requests that the June 2018 Order set forth a flawed procedural schedule by setting an initial 60 day comment period, with reply testimony

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[210] Maryland Commission Rehearing Request at 20-21; Clean Energy Associations Rehearing Request at 5, 6-7; Joint Consumer Advocates Rehearing and Extension Request at 23-24; Illinois AG Rehearing Request at 14-16.

[211] Joint Consumer Advocates Rehearing and Extension Request at 23-24; *see also* Illinois AG Rehearing Request at 14 (arguing that the 60-day initial comment period is "facially insufficient" in light of the number of issues to be addressed); Illinois Commission Rehearing Request at 22-24 (June 2018 Order provided limited guidance on proposed FRR Alternative and insufficient time to address changes).

[212] Joint Consumer Advocates Rehearing and Extension Request at 21-25.

[213] *Id.* at 21-22.

[214] *Id*. at 24.

[215] *Id*. at 27-28.

due 30 days thereafter (or 90 days from the date of the June 2018 Order).[216] This schedule was later extended to permit an additional 45 days for initial comments (or 105 days for initial comments), with reply comments due 35 days thereafter.[217] We are not persuaded that, under these circumstances, parties' opportunity to comment was legally insufficient. Calpine filed its complaint, in Docket No. EL16-49-000, in March 2016, providing notice that the then existing PJM Tariff may be revised to address state support for preferred resources. We further note that the comment period in this case conforms to typical comment time frames afforded by the Commission in comparable circumstances.[218] In any event, the Commission's extension of the hearing schedule moots the due process and other timing concerns raised by the parties regarding the schedule. While most parties requesting hearing would have preferred to leave the current Tariff in place and institute a more open-ended procedural schedule, with the Commission either providing preliminary guidance for a stakeholder process or instituting a traditional FPA section 206 show cause proceeding, we find that the extension, providing for more than 100 days to file initial testimony, and more than 30 days for reply testimony, afforded the parties a meaningful opportunity for comment.[219]

76. We also disagree that parties were deprived of an opportunity to comment on the actual replacement rate because the Commission sought comment on a proposed replacement rate. The Commission routinely conducts paper hearing proceedings to determine just and reasonable replacement rates, and this does not run afoul of notice protections.[220] If parties wish to comment on the replacement rate determined in the

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[216] June 2018 Order, 163 FERC ¶ 61,236 at P 72.

[217] Notice of Extension of Time, Docket Nos. EL16-49-000, ER18-1314-000, and EL18-178-000 (August 22, 2018).

[218] *See, e.g.*, *PJM Interconnection, L.L.C*, 169 FERC ¶ 61,049, at PP 142-143 (2019) (establishing 45 days to comment on capacity storage run-time rules in Commission instituted paper hearing proceeding); *Del. Pub. Serv. Comm'n v. PJM Interconnection, L.L.C.*, 164 FERC ¶ 61,035, at P 42 (2018) (*Del. Pub. Serv. Comm'n*) (finding tariff provisions unjust and unreasonable and instituting paper hearing to determine replacement with 60 day comment period).

[219] *See, e.g.*, *ISO New England, Inc.*, 131 FERC ¶ 61,065, at P 21 (2010) (establishing paper hearing procedures to address the just and reasonable replacement rate for the ISO New England capacity market, with initial comment period of 69 days and reply comment period of over 60 days).

[220] *See, e.g.*, *Del. Pub. Serv. Comm'n*, 164 FERC ¶ 61,035 at P 42 (finding tariff unjust and unreasonable and instituting paper hearing to determine replacement rate).

December 2019 Order, they will have an opportunity to do so in the compliance phase, and they had an opportunity to seek rehearing of the December 2019 Order.

### 7. Replacement Rate

#### a. Requests for Rehearing and Clarification

77. Parties object to the replacement rate proposed in the June 2018 Order, arguing that the proposed framework is not supported by substantial evidence, has not been shown to be just and reasonable,[221] and that a sweeping extension of the MOPR is not supported.[222] Public Power Entities argue that extending the MOPR to cover all existing resources benefiting from out-of-market support threatens market integrity because it could result in over-mitigation, cause customers to pay twice for capacity, and send incorrect price signals that more capacity is needed, and potentially exacerbate seller market power and opportunities for strategic behavior.[223]

78. A number of parties contend that the proposed replacement rate is unduly discriminatory, arguing that targeting some sources of out-of-market revenues while permitting other state and federal subsidies results in undue discrimination.[224] The Illinois Commission asserts that it is discriminatory against state programs providing out-of-market support for certain resources by assessing resources as competitive or non-competitive based on whether the resource receives sufficient revenues to cover their costs from PJM markets, and rejects consumer preferences.[225] PSEG states that targeting state policies that price externalities of electricity generation while permitting other federal, state, and local policies is "tantamount to picking winners and losers among

[221] *See* PJM-ICC Rehearing and Clarification Request at 2, 8, 18-22.

[222] Public Power Entities Rehearing Request at 4-5 (noting that exempting public power self-supply would mitigate some of their concerns).

[223] Public Power Entities Rehearing Request at 19-21; *see also* Illinois Commission Rehearing Request at 17-18 (proposed replacement rate would improperly and unnecessarily raise capacity costs for customers in all PJM states and target resources that are not exercising market power).

[224] Illinois Commission Rehearing Request at 3, 18-21; Clean Energy Associations Rehearing Request at 17-18, 20-22; Clean Energy Advocates Rehearing Request at 43-44; Joint Consumer Advocates Rehearing and Extension Request at 4, 19; Joint Consumer Advocates Rehearing and Extension Request at 20-21.

[225] Illinois Commission Rehearing Request at 14-16.

various externalities."[226] Nor, Clean Energy Advocates argues, does the Commission explain why RECs and ZECs are different from other valid state property rights.[227] Clean Energy Associations add that government policies have reduced the price of fuel used by fossil fuel resources, allowing them to submit suppressed offers.[228] Parties further contend that it is unduly discriminatory to address state policies that may result in offers that are too low without addressing policies that may result in offers that are too high.[229]

79. The Illinois Commission argues that in order to apply the MOPR in a non-discriminatory manner, all resources receiving out-of-market payments should be targeted, resulting in few resources being able to participate in the capacity market without being subject to the MOPR.[230] The Illinois Commission further contends that the intent or purpose behind an offer level is an important distinction, contrary to the June 2018 Order's finding that there is no substantive difference among resource participating in the capacity market with the benefit of out-of-market support, and that treating resources that submit offers to exercise market power the same as resources that submit offers designed to recover their costs is undue discrimination.[231]

80. Parties also advocate for specific terms to be incorporated in the replacement rate. Exelon argues that any replacement rate must accommodate state-supported resources and continue to recognize the capacity these resources provide to the system, noting that the replacement rate would not be just and reasonable absent a mechanism to allow states to make their own policy choices with regard to generation facilities and to prevent capacity from being over-procured.[232] Joint Consumer Advocates urge the Commission to provide for a transition period prior to full implementation of the replacement rate to

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[226] PSEG Rehearing Request at 14-15.

[227] Clean Energy Advocates Rehearing Request at 50-53.

[228] Clean Energy Associations Rehearing Request at 17-18.

[229] *Id.* at 21-22, 26.

[230] Illinois Commission Rehearing Request at 19; *see also* Exelon Rehearing Request at 12 (agreeing with Commissioner Glick's dissent that subsidies are ubiquitous and even a broader MOPR would not address all the various subsidies for power plants).

[231] Illinois Commission Rehearing Request at 20-21.

[232] Exelon Rehearing Request at 14-16.

allow state legislative and regulatory bodies to undertake the necessary preparations for a new capacity market construct.[233]

81. PJM and PJM-ICC seek clarification that the Commission's discussion of the proposed replacement rate framework in the June 2018 Order does not preclude the consideration of other alternatives or preordain a just and reasonable replacement rate.[234] Specifically, PJM asks for clarification that the June 2018 Order does not prohibit parties from including aspects of its Capacity Repricing proposal, or the Commission's consideration of such proposals, as part of a proposed solution to the unjust and unreasonable conditions identified by the Commission.[235] PJM-ICC maintains that the June 2018 Order recognizes that the preliminary findings have not yet been supported by sufficient evidence and, to the extent that the Commission does not grant its request for clarification that the June 2018 Order did not predetermine a just and reasonable replacement rate, PJM-ICC requests rehearing of the replacement rate framework on grounds that it is not supported by substantial evidence. In particular, PJM-ICC contends that the Commission did not cite any evidence supporting the conclusion that an expanded MOPR will be just and reasonable and did not support the FRR Alternative, which is not fully described in the June 2018 Order.[236] The Illinois AG argues that the Commission improperly excluded consideration of other approaches by presenting only two avenues for the new capacity market rules, and, in particular, that the FRR Alternative was not suggested by any party, but independently identified by the Commission.[237]

82. FirstEnergy and Dominion seek clarification regarding an exemption for capacity resources owned or controlled by vertically integrated utilities.[238] FirstEnergy requests clarification that, in finding that the existing MOPR is unjust and unreasonable and rejecting PJM's proposed tariff revisions, the Commission did not determine that

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[233] Joint Consumer Advocates Rehearing and Extension Request at 3, 4, 27 (suggesting that without a transition period, states may be forced to re-regulate or leave PJM altogether).

[234] PJM Clarification and Rehearing Request at 4-6; PJM-ICC Rehearing and Clarification Request at 2, 16-18, 23.

[235] PJM Clarification and Rehearing Request at 4-6.

[236] PJM-ICC Rehearing and Clarification Request at 17-20.

[237] Illinois AG Rehearing Request at 13.

[238] FirstEnergy Clarification and Rehearing Request at 2-10; Dominion Rehearing and Clarification Request at 3, 16-17.

excluding vertically integrated resources from mitigation is not just and reasonable.[239] FirstEnergy also requests that the Commission clarify that the Commission's discussion of the replacement rate did not intend to suggest that the expanded MOPR should exclude an exemption for vertically integrated resources.[240] Similarly, Dominion requests clarification whether a self-supply exemption for vertically integrated resources is open for discussion in the paper hearing. If not, Dominion states that the Commission should restore the status quo tariff and order PJM to continue working on capacity market reforms with stakeholders.[241] In the alternative, Dominion and FirstEnergy seek rehearing if the Commission intends that no self-supply exemption be available for vertically integrated utilities, claiming that vertically integrated utilities do not raise price suppression concerns and that the record lacks evidence that this exemption would be unjust and unreasonable.[242]

### b. Commission Determination

83. Regarding the requests for clarification that the June 2018 Order did not prejudge the replacement rate, we confirm that the replacement rate framework set forth in the June 2018 Order was only a proposal on which the Commission sought comment.[243] The June 2018 Order did not make findings on possible MOPR exemptions or what resources will be subject to the MOPR, stating in the June 2018 Order that we are not able to determine the just and reasonable replacement rate based on the record.[244] In fact, in the December 2019 order, the Commission considered the issues raised by the Commission previously in the June 2018 Order and the comments filed in the paper hearing proceeding to produce a just and reasonable replacement rate different from the preliminary proposal.[245] In the paper hearing proceeding, parties had the opportunity

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[239] FirstEnergy Clarification and Rehearing Request at 4-6.

[240] *Id*. at 6.

[241] Dominion Rehearing and Clarification Request at 3, 16.

[242] *Id.* at 16-17; First Energy Clarification and Rehearing Request at 4, 6-10.

[243] June 2018 Order, 163 FERC ¶ 61,236 at P 157 ("[W]e preliminarily find that modifying two aspects of the PJM Tariff may produce a just and reasonable rate.").

[244] *Id*. P 7.

[245] December 2019 Order, 169 FERC ¶ 61,239 at PP 2-16.

to,[246] and indeed many parties did, provide additional proposals for the Commission's consideration, including PJM's reiteration of its Capacity Repricing proposal in the form of Extended Resource Carve Out and an exemption for self-supply resources, including vertically integrated resources, proffered by PJM and other parties. The June 2018 Order did not establish a replacement rate, so rehearing arguments relevant to the merits and specifics of the replacement rate are beyond the scope of rehearing of the June 2018 Order and will not be addressed here. Arguments relating to the replacement rate should have been raised in briefs filed in response to the June 2018 Order, or in rehearing requests of the December 2019 Order, which will be addressed in a separate order.

### 8. Miscellaneous Procedural Arguments

#### a. Requests for Rehearing and Clarification

84. ODEC requests clarification that, by establishing a March 21, 2016 refund effective date for Docket No. EL16-49-000 (Calpine Complaint) and July 11, 2018 effective date for Docket No. EL18-178-000 (Commission *sua sponte* section 206 finding),[247] the Commission has not predetermined whether any remedy or modification to the capacity construct resulting from the proceeding will be applied retroactively back to the refund effective date. ODEC also asks that the Commission clarify that the time period for application of any remedy or design changes required as an outcome of this proceeding will be determined at a later date.[248] To the extent that the Commission does not grant this clarification, ODEC seeks rehearing on the basis that the refund effective dates will impose a retroactive remedy that will require re-running past capacity auctions, contrary to the Commission's policy against upsetting past market outcomes.[249]

85. Clean Energy Associations argue that, by consolidating the records in EL16-49-000 and ER18-1314-000 to find PJM's Tariff unjust and unreasonable, the Commission relied on an incomplete record. Specifically, Clean Energy Associations assert that the Calpine Complaint proceeding in EL16-49-000 focused on state support for existing nuclear plants and parties commented on that, whereas PJM's section 205 filing in ER18-1314-000 dealt with market redesign proposals, and parties were not on notice that the

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[246] June 2018 Order, 163 FERC ¶ 61,236 at P 172 (stating that the paper hearing will address a just and reasonable replacement rate, "including the proposal identified [in the June 2018 Order] or any other proposal that may be presented").

[247] *See id.* at P 174.

[248] ODEC Clarification and Rehearing Request at 3

[249] *Id*. at 4-6.

record compiled in one proceeding would be used in another to answer a different question.[250]

86. Illinois Commission argues that the Commission effectively took administrative notice of the combined records in Docket Nos. ER18-1314 and EL16-49, which is only appropriate where facts are not in dispute, and not where a hearing should have been held, as the Illinois Commission contends should have occurred here.[251]

87. The Illinois Commission argues that the Commission erred in failing to rule on the Illinois Commission's motion to dismiss PJM's section 205 filing in Docket No. ER18-1314-000.[252] According to the Illinois Commission, even though the Commission rejected PJM's Capacity Repricing and MOPR-Ex proposals in the June 2018 Order, the Commission nonetheless relied on the record in Docket No. ER18-1314-000 to justify opening a section 206 investigation into PJM's capacity market design, a record that the Illinois Commission contends is faulty and fails to substantiate that state subsidies cause price suppression.[253]

88. The Illinois Commission further argues that the Commission erred in failing to rule on the Illinois Commission's motion to strike answers filed by PJM and the Market Monitor in Docket No. ER18-1314-000,[254] contending that PJM's answer was untimely, and that the Market Monitor's answer misrepresented facts regarding the Illinois ZEC legislation and should therefore not be relied upon.[255] The Illinois Commission also asserts that the Commission erred by not ruling on a motion to dismiss the amended

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[250] Clean Energy Associations Rehearing Request at 10 n.15.

[251] Illinois Commission Rehearing Request at 4-6 (citing Federal Rules of Evidence Rule 201 regarding judicial notice that judicial notice is an exception to the requirement that decisions be based on evidence adduced at hearing). The Illinois Commission also contends that the Commission failed to rule on its motions to dismiss in both dockets and its motion to strike in Docket No. ER18-1314, calling into question validity of the filings). *Id*. at 5.

[252] *See* Illinois Commission, Motion to Dismiss and Protest, Docket No. ER18-1314-000 (filed May 7, 2018).

[253] Illinois Commission Rehearing Request at 24-25.

[254] *See* Illinois Commission, Motion to Strike, Motion for Leave to Answer, and Answer, Docket No. ER18-1314-0000 (filed June 14, 2018).

[255] Illinois Commission Rehearing Request at 25.

complaint filed in Docket No. EL16-49-000,[256] arguing that the amended complaint was not germane to the original complaint, which allegedly focused only on certain subsidies.[257]

### b. Commission Determination

89. With regard to ODEC's clarification request regarding the established refund effective dates, we confirm that the mere setting of a refund effective date does not mean that the Commission has determined whether or when any refund would apply. In any event, this request is moot as the Commission exercised its discretion not to order refunds.[258]

90. We disagree with Clean Energy Associations that the Commission improperly consolidated the records in the Calpine Complaint and April 2018 Filing proceedings to find PJM's Tariff unjust and unreasonable. The Commission enjoys significant discretion in deciding how to process its cases.[259] The June 2018 Order explained the Commission's authority to consolidate cases and why consolidation is appropriate here.[260] We also disagree that consolidation deprived parties of notice regarding the Commission's decision to *sua sponte* commence a section 206 proceeding to determine the replacement rate. Parties were given notice and opportunity to comment in both

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[256] *See* Dayton Power & Light Co. et al., Motion to Dismiss Complaint, To Oppose Acceptance of Motion to Amend Complaint and To Dismiss Amendment to the Complaint and Request for Expedited Action, Docket No. EL16-49-000 (filed Jan. 24, 2017).

[257] Illinois Commission Rehearing Request at 25.

[258] December 2019 Order, 169 FERC ¶ 61,239 at P 3.

[259] *See Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc.*, 435 U.S. 519, 524-25 (1978) (agencies have broad discretion over the formulation of their procedures); *FPC v. Transcon. Gas Pipe Line Corp.*, 423 U.S. 326, 333-34 (1976) ("a reviewing court may not . . . dictat[e] to the agency the methods, procedures, and time dimension of the needed inquiry"); *Superior Oil Co. v. FERC*, 563 F.2d 191, 201 (5th Cir. 1977) ("We ordinarily will defer to an agency's choices concerning its procedures because in making such choices agencies are best situated to determine how they should allocate their finite resources.").

[260] June 2018 Order, 163 FERC ¶ 61,236 at P 6 n.9.

proceedings upon which the Commission based its section 206 finding, as well as opportunity to comment on the proposed replacement rate.[261]

91. We also disagree with the Illinois Commission that the Commission improperly took administrative notice of the records in the Calpine Complaint proceeding and PJM April 2018 Filing. In arguing this, the Illinois Commission implies that it is impermissible for the Commission to make findings based on what is provided in the record, rather than in a hearing, if there is competing record evidence. The Commission properly exercised its discretion to consolidate these proceedings and therefore appropriately considered the record in each of these dockets, and a hearing was not required.[262]

92. We disagree with the Illinois Commission that the Commission erred by not ruling on its motion to dismiss PJM's section 205 filing. As an initial matter, the Illinois Commission's motion was rendered moot, to the extent the Commission found, as the Illinois Commission urged, that PJM failed to demonstrate that its proposal was just and reasonable. To the extent the Illinois Commission argues that had the Commission dismissed PJM's April 2018 Filing, the Commission could not have relied upon the record to find PJM's Tariff unjust and unreasonable, we disagree. Even if the Commission had ruled directly on the Illinois Commission's motion, we see no basis for disregarding, and the Illinois Commission has cited no precedent requiring that the Commission disregard, the record compiled on PJM's section 205 filing. Moreover, for the reasons discussed at length above, the record supports the Commission's finding that PJM's Tariff was unjust and unreasonable.

93. As to Dayton, et al.'s motion to dismiss the amended complaint, in Docket No. EL16-49-000, the amended complaint was properly before the Commission, pursuant to the Commission's Rules of Practice and Procedure,[263] which permits amended pleadings. We are not persuaded that the subject of the amended complaint–the adoption of ZECs

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[261] *See* PJM Interconnection, L.L.C.; *Notice of Institution of Section 206 Proceeding and Refund Effective Date*, 83 Fed. Reg. 32,113 (July 11, 2018) (providing notice of opportunity to comment on replacement rate).

[262] *See Ill. Commerce Comm'n v. FERC*, 721 F.3d 764, 776 (7th Cir. 2013) ("FERC need not conduct an oral hearing if it can adequately resolve factual disputes on the basis of written submissions."); *Union Pac. Fuels, Inc. v. FERC*, 129 F.3d 157, 164 (D.C. Cir. 1997) ("FERC may resolve factual issues on a written record unless motive, intent, or credibility are at issue or there is a dispute over a past event."). Further, since the Commission is not bound by the Federal Rules of Evidence, we disagree that the Commission improperly took judicial notice of the consolidated records.

[263] 18 C.F.R. § 385.215 (2019).

legislation by the State of Illinois–was not germane to the underlying complaint, as the Illinois Commission asserts given that the complaint was about subsidies generally, not just those cited as examples.

94. Finally, we disagree with the Illinois Commission's assertion that the Commission erred by accepting the May 25, 2018 answers, submitted by PJM and the Market Monitor, while declining to accept, or otherwise address, the Illinois Commission's motion to strike those answers, effectively, an answer to an answer. The Commission's Rules of Practice and Procedure prohibit an answer to an answer unless otherwise ordered by the decisional authority, and having reviewed the disputed answers, the Commission properly exercised its discretion to accept them.[264]

### 9. Capacity Repricing Rehearing and Clarification Requests

#### a. Clarification and Rehearing Requests

95. While no party challenges the Commission's rejection of PJM's Capacity Repricing proposal, PJM, the Illinois Commission, and Clean Energy Advocates raise concerns with some of the language the Commission used in the June 2018 Order. PJM asks the Commission to reconsider the finding that the Capacity Repricing proposal would artificially inflate clearing prices.[265] PJM argues that resetting a subsidized offer to its relative level compared to the supply stack approximates the competitive outcome had there been no subsidy, similar to applying a MOPR. According to PJM this is because the clearing price and cleared quantity would be the same whether a subsidized offer was set under either Capacity Repricing or a MOPR. What differentiates Capacity Repricing from a MOPR, PJM argues, is which resources make up the cleared quantity. PJM insists that the resulting clearing price under Capacity Repricing, as opposed to the resource mix, is not "artificially inflated" and the Commission's finding on this point is contrary to fact and prior Commission orders that found that the MOPR, which PJM asserts operates like Capacity Repricing in terms of setting the clearing price, ensures just and reasonable prices.[266]

96. Stating that the Commission was correct in rejecting Capacity Repricing, the Illinois Commission nonetheless argues that the June 2018 Order's statement that Capacity Repricing "represents and unjust and unreasonable cost shift to loads who should not be required to underwrite, through capacity payments, the generation

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[264] 18 C.F.R. § 385.213(a) (2019).

[265] PJM Clarification and Rehearing Request at 6-10; June 2018 Order, 163 FERC ¶ 61,236 at P 64.

[266] PJM Clarification and Rehearing Request at 7-9.

preferences that other regulatory jurisdictions have elected to impose on their own constituents."[267] The Illinois Commission contends that there is no evidence demonstrating that the Illinois ZEC program or other state policies result in such cost shifts.

97. Clean Energy Advocates ask the Commission to narrow, reverse, or clarify the June 2018 Order's statement that "[t]he receipt of out-of-market support is a difference that *requires* different ratemaking treatment when such support has a material effect on price or cannot otherwise be justified by our statutory standards."[268] Clean Energy Advocates are concerned that this statement suggests that out-of-market support should apply to state-sponsored resources in all markets, including energy and ancillary services markets, and assert that this determination would not be supported by the record in this proceeding.[269]

**b. <u>Commission Determination</u>**

98. In response to PJM's request for rehearing regarding Capacity Repricing, the Commission affirms its findings regarding the Capacity Repricing proposal, including that the proposal "artificially inflates" clearing prices, noting that these findings are confined to the as-filed Capacity Repricing proposal,[270] which was offered as a stand-alone solution, and which disconnected the determination of price and quantity for the sole purpose of facilitating the participation of subsidized resources in the PJM capacity market. We disagree with PJM that Capacity Repricing as proposed in the April 2018 Filing would not artificially increase clearing prices. Although both the MOPR and PJM's Capacity Repricing proposal produce market clearing prices that are meant to approximate competitive outcomes had there been no subsidy, under Capacity Repricing, that price would be "disconnected from the price used to determine which resources receive capacity commitments" to enable the participation of state-supported resources.[271] By disconnecting the determination of price and quantity in that manner, PJM's Capacity Repricing proposal would have sent incorrect price signals to guide entry and exit

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[267] Illinois Commission Rehearing Request at 17 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 67).

[268] Clean Energy Advocates Rehearing Request at 53 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 68 (emphasis added)).

[269] *Id*.

[270] *See* June 2018 Order, 163 FERC ¶ 61,236 at PP 64-65.

[271] *Id.* P 64.

decisions. Accordingly, PJM's assertion that its Capacity Repricing proposal operates similarly to the MOPR—and likewise ensures just and reasonable rates—is misplaced.

99. We affirm the June 2018 Order's finding that Capacity Repricing represents an unjust and unreasonable cost shift to loads. Capacity Repricing would have allowed subsidized resources to displace more economic, unsubsidized resources, which would hinder the ability of the market to attract competitive new entry, shifting the financial and operational risks associated with providing capacity from investors to consumers, while also resulting in price increases above the offer of the marginal unit.

100. In response to Clean Energy Advocates' clarification request, the Commission's decision in the June 2018 Order is based on the record pertaining to the PJM capacity market and the Commission did not make any findings with respect to other markets. This proceeding is solely focused on the effects of various state subsidies on the capacity market. Should regulated utilities believe there is merit in the contention of Clean Energy Advocates, we invite new filings to initiate a separate proceeding.

<u>The Commission orders</u>:

(A) The requests for rehearing are hereby denied, as discussed in the body of this order.

(B) The requests for clarification are hereby granted, as discussed in the body of this order.

By the Commission. Commissioner Glick is dissenting with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., GDF SUEZ Energy Marketing NA, Inc., Oregon Clean Energy, LLC and Panda Power Generation Infrastructure Fund, LLC v. PJM Interconnection, L.L.C. | Docket Nos. | EL16-49-001 |
| PJM Interconnection, L.L.C. | | EL18-178-001 |
| PJM Interconnection, L.L.C. | | ER18-1314-002 (Consolidated) |

(Issued April 16, 2020)

GLICK, Commissioner, *dissenting*:

1. From the beginning, this proceeding has been about two things: Dramatically increasing the price of capacity in PJM Interconnection, L.L.C. (PJM) and slowing the region's transition to a clean energy future. Today's orders on rehearing make that even more clear.[1] Accordingly, I dissent as strongly as I can from both orders, which are illegal, illogical, and truly bad public policy.

2. The Commission started down this road in June 2018, when it is issued a deeply misguided order finding that PJM's capacity market was unjust and unreasonable because it did not prevent state public policies from influencing the resource mix in PJM's capacity market.[2] Then-Commissioner LaFleur aptly described that decision, which was

[1] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,035 (2020) (December 2019 Rehearing Order); *Calpine Corp. v. PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,034 (2020) (June 2018 Rehearing Order).

[2] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 (2018) (June 2018 Order).

based on a tenuous theory and a thin record, as "a troubling act of regulatory hubris."[3] To address the purported problems with the capacity market, the June 2018 Order proposed a so-called "resource-specific FRR Alternative"[4] that would have bifurcated the market and cordoned off state-sponsored resources.

3. Then, in December 2019, after a year and a half of indecision, the Commission took a sharp right turn, altogether abandoning the resource-specific FRR Alternative in favor of a radical effort to extirpate state subsidies from the capacity market.[5] That order established a sweeping definition of state subsidy that will subject much, if not most, of the resources in PJM's capacity market to a minimum offer price rule (MOPR). In so doing, the Commission turned the "market" into a system of bureaucratic pricing so pervasive that it would have made the Kremlin economists in the old Soviet Union blush. In addition, the order created a number of exemptions to the MOPR that will have the principal effect of entrenching the current resource mix by excluding several classes of existing resources from mitigation. Finally, in ditching the resource-specific FRR Alternative, the Commission made clear that it had no concern for the interests of states seeking to exercise their authority over generation resources or for the customers that would be left to pick up the tab.

4. Today's orders affirm the conclusions in both the June 2018 and December 2019 Orders with a degree of condescension that is unbecoming of an agency of the federal government. And, as if that were not enough, today's orders show no interest in the careful, detailed analysis that has long been the Commission's hallmark. Instead, they turn away the several dozen rehearing requests with little more than generalities and claims that the parties misunderstood the underlying orders or the governing law—a charge that often more accurately describes the Commission's orders today than it does those rehearing requests.[6] All parties deserve better from this Commission, even the ones that will benefit financially from today's orders.

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[3] *Id.* (LaFleur, Comm'r, dissenting at 5) ("The majority is proceeding to overhaul the PJM capacity market based on a thinly sketched concept, a troubling act of regulatory hubris that could ultimately hasten, rather than halt, the re-regulation of the PJM market.").

[4] "FRR" stands for Fixed Resource Requirement.

[5] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,239 (2019) (December 2019 Order).

[6] Today's orders address both the requests filed in response to the June 2018 Order and the December 2019 Order. Unless otherwise indicated, citations to rehearing requests refer to requests filed in response to the December 2019 Order.

## I. Today's Orders Unlawfully Target a Matter under State Jurisdiction

5. The FPA is clear. The states, not the Commission, are the entities responsible for shaping the generation mix. Although the FPA vests the Commission with jurisdiction over wholesale sales of electricity as well as practices affecting those wholesale sales,[7] Congress expressly precluded the Commission from regulating "facilities used for the generation of electric energy."[8] Congress instead gave the states exclusive jurisdiction to regulate generation facilitates.[9]

6. But while those jurisdictional lines are clearly drawn, the spheres of jurisdiction themselves are not "hermetically sealed."[10] One sovereign's exercise of its authority will

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[7] Specifically, the FPA applies to "any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission" and "any rule, regulation, practice, or contract affecting such rate, charge, or classification." 16 U.S.C. § 824e(a) (2018); *see also id*. § 824d(a) (similar).

[8] *See id.* § 824(b)(1) (2018); *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1292 (2016) (describing the jurisdictional divide set forth in the FPA); *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760, 767 (2016) (*EPSA*) (explaining that "the [FPA] also limits FERC's regulatory reach, and thereby maintains a zone of exclusive state jurisdiction"); *Panhandle E. Pipe Line Co. v. Pub. Serv. Comm'n of Ind.*, 332 U.S. 507, 517-18 (1947) (recognizing that the analogous provisions of the NGA were "drawn with meticulous regard for the continued exercise of state power"). Although these cases deal with the question of preemption, which is, of course, different from the question of whether a rate is just and reasonable under the FPA, the Supreme Court's discussion of the respective roles of the Commission and the states remains instructive when it comes to evaluating how the application of a MOPR squares with the Commission's role under the FPA.

[9] 16 U.S.C. § 824(b)(1); *Hughes*, 136 S. Ct. at 1292; *see also Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 205 (1983) (recognizing that issues including the "[n]eed for new power facilities, their economic feasibility, and rates and services, are areas that have been characteristically governed by the States").

[10] *EPSA*, 136 S. Ct. at 776; *see Oneok, Inc. v. Learjet, Inc.*, 135 S. Ct. 1591, 1601 (2015) (explaining that the natural gas sector does not adhere to a "Platonic ideal" of the "clear division between areas of state and federal authority" that undergirds both the FPA and the Natural Gas Act).

inevitably affect matters subject to the other sovereign's exclusive jurisdiction.[11] For example, any state regulation that increases or decreases the number of generation facilities will, through the law of supply and demand, inevitably affect wholesale rates.[12] But the existence of such cross-jurisdictional effects is not necessarily a "problem" for the purposes of the FPA. Rather, those cross-jurisdictional effects are the product of the "congressionally designed interplay between state and federal regulation"[13] and the natural result of a system in which regulatory authority over a single industry is divided between federal and state government.[14] Maintaining that interplay and permitting each sovereign to carry out its designated role is essential to the cooperative federalist regime that Congress made the foundation of the FPA.

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[11] *See EPSA*, 136 S. Ct. at 776; *Oneok*, 135 S. Ct. at 1601; *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 57 (2d Cir. 2018) (explaining that the Commission "uses auctions to set wholesale prices and to promote efficiency with the background assumption that the FPA establishes a dual regulatory system between the states and federal government and that the states engage in public policies that affect the wholesale markets").

[12] *Zibelman*, 906 F.3d at 57 (explaining how a state's regulation of generation facilities can have an "incidental effect" on the wholesale rate through the basic principles of supply and demand); *id.* at 53 ("It would be 'strange indeed' to hold that Congress intended to allow the states to regulate production, but only if doing so did not affect interstate rates." (quoting *Nw. Cent. Pipeline Corp. v. State Corp. Comm'n of Kansas*, 489 U.S. 493, 512-13 (1989) (*Northwest Central*))); *Elec. Power Supply Ass'n v. Star*, 904 F.3d 518, 524 (7th Cir. 2018) (explaining that the subsidy at issue in that proceeding "can influence the auction price only indirectly, by keeping active a generation facility that otherwise might close . . . . A larger supply of electricity means a lower market-clearing price, holding demand constant. But because states retain authority over power generation, a state policy that affects price only by increasing the quantity of power available for sale is not preempted by federal law.").

[13] *Hughes*, 136 S. Ct. at 1300 (Sotomayor, J., concurring) (quoting *Northwest Central*, 489 U.S. at 518); *id.* ("recogniz[ing] the importance of protecting the States' ability to contribute, within their regulatory domain, to the Federal Power Act's goal of ensuring a sustainable supply of efficient and price-effective energy").

[14] *Cf. Star*, 904 F.3d at 523 ("For decades the Supreme Court has attempted to confine both the Commission and the states to their proper roles, while acknowledging that each use of authorized power necessarily affects tasks that have been assigned elsewhere.").

7. In recent years, the Supreme Court has repeatedly admonished both the Commission and the states that the FPA prohibits actions that "aim at" or "target" the other sovereign's exclusive jurisdiction.[15] Beginning with *Oneok*, the Court underscored that its "precedents emphasize the importance of considering the *target* at which the state law *aims*."[16] The Court has subsequently explained how that general principle plays out in practice when analyzing the limits on both federal and state authority. In *EPSA,* the Court held that the Commission can regulate a practice affecting wholesale rates, provided that the practice "directly" affects those rates and that the Commission does not regulate or target a matter reserved for exclusive state jurisdiction.[17] And, in *Hughes,* the Court returned to this theme, explaining that the FPA prohibits one sovereign from exercising its authority in a manner that aims at or targets the other sovereign's exclusive jurisdiction, which, in that case, meant that a state could not "tether" its regulations to the Commission-jurisdictional wholesale market by requiring the resource to bid and clear in that market in order to secure a subsidy.[18] Together, those cases stand for the unremarkable proposition that the FPA prohibits one sovereign from taking advantage of the law's cooperative federalist model to aim at or target, and, thus, interfere with, the other sovereign's exclusive jurisdiction.

8. But that is exactly what the Commission's new MOPR does. The record in this proceeding makes unmistakably clear that the purpose and effect of the new MOPR is to interfere with state regulation of generation facilities. Indeed, at every turn, the

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[15] *E.g., Hughes*, 136 S. Ct. at 1298 (relying on *Oneok*, 135 S. Ct. at 1599, for the proposition that a state may regulate within its sphere of jurisdiction even if its actions "incidentally affect areas within FERC's domain" but that a state may not target or intrude on FERC's exclusive jurisdiction); *EPSA*, 136 S. Ct. at 776 (emphasizing the importance of "'the *target* at which [a] law *aims*'" (quoting *Oneok*, 135 S. Ct. at 1600)); *Oneok*, 135 S. Ct. at 1600 (recognizing "the distinction between 'measures *aimed directly at* interstate purchasers and wholesales for resale, and those aimed at' subjects left to the States to regulate") quoting *N. Nat. Gas Co. v. State Corp. Comm'n of Kan.*, 372 U.S. 84, 94 (1963) (*Northern Natural*))).

[16] *Oneok*, 135 S. Ct. at 1600 (discussing *Northern Natural*, 372 U.S. at 94, and *Northwest Central*, 489 U.S. at 513-14).

[17] *EPSA*, 136 S. Ct. at 775-77; *id.* at 776.

[18] *Hughes*, 136 S. Ct. at 1298, 1299. In the intervening few years, the lower federal courts have carefully followed the Court's discussion of the prohibition on one sovereign regulating in a manner that interferes with the other sovereign's authority by targeting matters subject to their exclusive jurisdiction. *See, e.g., Zibelman*, 906 F.3d at 50-51, 53; *Star,* 904 F.3d at 523-24; *Allco Fin. Ltd. v. Klee,* 861 F.3d 82, 98 (2d Cir. 2017).

Commission's has described the new MOPR as targeting the PJM states' exercise of their exclusive jurisdiction to regulate generation facilities under FPA section 201(b). For example, the Commission began its determination section in the June 2018 Order with a discussion of purported problems evidenced in "[t]he records [before it, which] demonstrate that states have provided or required meaningful out-of-market support to resources in the current PJM capacity market, and that such support is projected to increase substantially in the future"[19]—*i.e.*, the simple fact that states are exercising their reserved authority. The Commission explained that states' exercise of their reserved authority created "significant uncertainty" and left other resources unable to "predict whether their capital will be competing against" subsidized or unsubsidized units,[20] again making clear that it is the mere exercise of that authority that is the purported problem. And, ultimately, the Commission found that PJM's tariff was unjust and unreasonable because it did not prevent the ineluctable effects of state action from making their way to the wholesale market.[21]

9. The December 2019 order made the Commission's attempt to interfere with state authority even more clear. Its rationale for the new MOPR was that it was needed to combat increasing state policies and ensure that state actions do not shape entry and exit through the capacity market.[22] In addition, the Commission focused *only* on what it deemed to be states' regulation of generation facilities, explicitly ignoring other state policies that might equally affect wholesale rates, such as so-called general industrial development policies or local siting support.[23] That concession is plain evidence that the

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[19] June 2018 Order, 163 FERC ¶ 61,236 at P 149.

[20] *Id.* P 150.

[21] *Id.* P 156; *EPSA*, 136 S. Ct. at 776 (explaining that because the federal and state spheres of jurisdiction "are not hermetically sealed from each other," " virtually any action" one sovereign takes pursuant to its authority will have "some effect" on matters within the other's sphere of jurisdiction).

[22] December 2019 Order, 169 FERC ¶ 61,239 at P 37.

[23] *Id.* P 83; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 68, 108. The Commission has never attempted to provide a rational justification for that distinction. It certainly did not distinguish between acceptable and unacceptable state policies based on their effects on wholesale rates given that there is no record evidence bearing on that point and certainly no discussion of such a distinction in any of the Commission's orders in this proceeding. *See infra* section II.B.1.c. Instead, the Commission asserted that it was concerned only with those state efforts that it determined (again with no analysis) to be "most nearly directed at or tethered to" the wholesale rate. December 2019 Order, 169 FERC ¶ 61,239 at P 68 (internal quotation marks and

new MOPR is not about the effects of state actions on wholesale rates, but rather all about blocking particular state efforts to shape the generation mix. Indeed, it is irrational in the extreme to profess concern about the effects of state policies on the generation mix, but then completely ignore whole classes of state policies that significantly affect wholesale prices in order to focus exclusively on the particular subsidies that various states have enacted pursuant to their reserved authority under FPA section 201(b). That result, and the Commission's total failure to provide a reasoned explanation for the arbitrary lines it drew, show this proceeding for what it is: An effort aimed directly at state efforts to shape the generation mix, price suppression pretext notwithstanding.[24]

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footnotes omitted); *see* Clean Energy Advocates Rehearing Request at 32 ("The Commission . . . cobbles together a test of whether policies are 'nearly directed at' or 'tethered to' new entry or continued operation of generating capacity. This test, too, lacks any substantive articulation of explanation, and the Commission does not establish how or why such policies would have the greatest impact on rates." (footnotes omitted)). That rather awkward repurposing of a preemption term of art tells us nothing. The term "untethered" first entered the FPA lexicon in *Hughes*, 136 S. Ct. at 1299, and the specific concept of "tethering" described in that opinion has played an important role in subsequent FPA preemption litigation. *E.g.*, *Zibelman*, 906 F.3d at 51-55; *Star*, 904 F.3d at 523-24; *Allco*, 861 F.3d at 102. But until December 2019, it was never used as the yardstick for targeting particular state policies that are concededly "untethered" to the wholesale rate. It is not obvious, and the Commission certainly does not explain, why being a valid exercise of state jurisdiction that is close-to-but-not preempted should be relevant to our analysis, especially if that analysis is nominally only about wholesale market effects. Preemption is a binary determination, which is distinctly unlike horseshoes or hand grenades. The failure to provide a reasoned basis for distinguishing between acceptable and unacceptable state policies is itself arbitrary and capricious and only underscores the extent to which the Commission's order targets state jurisdiction, notwithstanding its scattered statements about price suppression and wholesale rates.

[24] In addition, the disparate treatment that the Commission accords different types of state policies underscores the extent to which it is meddling in state jurisdiction. The new MOPR is laser-focused on mitigating anything that increases a resource's revenue, but expressly excludes anything that decreases its costs. *See infra* Section II.B.1.d; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 390 (explaining that the Commission will not treat the Regional Greenhouse Gas Initiative (RGGI) as a subsidy because it "does not provide payments, concessions, rebates, or other financial benefits to resources" even though it meets every other prong of the Commission's subsidy definition, *see* December 2019 Order, 169 FERC ¶ 61,239 at P 67). That means that, in the Commission's eyes, any state policy that augments a resource's revenue is a "problem" that must be solved, but that any state policy that decreases its relative costs is not. But, in a construct where offer prices are calculated as costs *net* of revenues, *see*

10. And, lest there be any doubt, the December 2019 Order made clear that the Commission fully understood the effect of the MOPR on those disfavored state policies. As discussed further below,[25] the Commission refused to extend the MOPR to federal policies because doing so would "nullify" those policies.[26] Indeed, the Commission asserted that federal subsidies "distort competitive market outcomes" every bit as much as state subsidies[27] and that the only reason to refrain from applying the new MOPR to federal subsidies is that the Commission lacks the power to "nullify" or "disregard" federal legislation."[28] That moment of honesty revealed that the Commission knew exactly what its new MOPR did to the state regulation of generation facilities targeted in its order, undercutting its various statements about the MOPR's supposed limited effect on state resource decisionmaking. The problem for the Commission, is that it is equally impermissible for it to use its authority over wholesale rates in an attempt to nullify state regulation of the generation mix and it cannot, consistent with reasoned decisionmaking, insist that the MOPR has one effect on federal policies and a totally different effect on state policies. If the MOPR would nullify federal policies—an assessment with which I agree—than it must equally nullify state policies.

11. And, finally, the December 2019 Order admitted that its purpose was to the disfavored state actions with what the Commission described as "price signals on which investors and consumers can rely to guide the orderly entry and exit of economically efficient capacity resources."[29] That is to say, its goal was to establish a set of price signals to determine resource entry and exit in the capacity market *for the explicit purpose* of superseding state resource decisionmaking and to better reflect the

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*infra* Section II.B.4, as both the net cost of new entry (Net CONE) and net avoidable cost rate (Net ACR) offer floors are, *see* Section II.B.4, whether a state policy operates on the revenue or cost side of resource's equation is utterly immaterial. Putting aside whether that distinction makes any sense, it shows the extent to which the Commission is meddling in state resource decisionmaking by finding that the effects of certain state policies are legitimate while the identical effects of others are not.

[25] *See infra* Section II.B.1.a.

[26] December 2019 Order, 169 FERC ¶ 61,239 at PP 10, 89.

[27] *Id.* P 10.

[28] *Id.* PP 10, 89.

[29] *Id.* P 40.

Commission's preferences for merchant generators that do not rely on compensation they receive for addressing externalities.

12. In short, the December 2019 Order conceded that the "problem" was state efforts to shape the generation mix, that the Commission was focused *only* on those state efforts, that the Commission's action would "nullify" those state efforts, and that it would override those efforts in order to send price signals that better aligned with the Commission's preferences.[30] That directly targets states' reserved authority under section 201(b).

13. Today's orders erase any lingering doubt about the purpose and effect of the Commission's new MOPR. In addition to affirming its earlier statements, the Commission doubles down on its still unexplained "most nearly tethered" standard, this time describing it as some form of administrative grace for which states should thank their lucky stars.[31] Putting aside the dripping arrogance of that worldview, the only issue that phrase elucidates is the extent to which today's orders are focused on blocking state efforts to shape the resource mix and not on the effects of state policies on wholesale markets.[32] After all, if today's orders were actually concerned with the wholesale-market effects of state policies, they would not excuse from the new MOPR general industrial development policies and local siting support—categories which have much larger effects on the wholesale market than many of the policies targeted in today's orders.[33]

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[30] As discussed further below, it is hard to tally up the cumulative effect of today's orders and find that characterization even remotely accurate. In any case, a policy of blocking state efforts to address externalities is itself very much a policy, not the absence thereof. Elsewhere, the Commission suggests that it lacks the authority to directly address any environmental considerations. *E.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 41. Assuming, for the moment, the accuracy of that statement, it still does not explain why the Commission should or must affirmatively block state efforts to the same using authority that no one contests they possess.

[31] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 78; *see supra* note 23.

[32] As discussed above, *supra note* 23 and accompanying text, the Commission's unexplained focus on only certain state policies, and not others that might equally cause the sort of price suppression about which it purports to be so concerned, lays bare that today's orders is about blocking disfavored state policies and not wholesale market effects. *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106 ("[T]he expanded MOPR is not intended to address all commercial externalities or opportunities that might affect the economics of a particular resource.").

[33] *See infra* Section II.B.3.

14. But that is not even the half of it. A few hundred paragraphs later, the Commission comes right out and admits that its goal is to penalize and, ultimately, discourage states from exercising their exclusive jurisdiction. In patting itself on the back for issuing what it describes as a "decisive order," the Commission laments the fact that its supposedly decisive order was not enough to deter states from continuing to exercise their section 201(b) jurisdiction.[34] But it is no more our role to deter states from regulating generation facilities than it is the states' role to prevent us from ensuring that rates are just and reasonable.[35] And, as the Supreme Court has repeatedly made clear, the FPA does not permit FERC or the states to exercise their authority under the FPA to target the other sovereign's exclusive jurisdiction.[36]

15. All told, this simply is not a proceeding where "the Commission's justifications for regulating . . . are all about, and only about, improving the wholesale market."[37] Unlike the rule upheld in *EPSA*, where the matters subject to state jurisdiction "figure[d] no more in the Rule's goals than in the mechanism through which the Rule operates," state actions are front and center in the Commission's justification for acting.[38] To be sure, the Commission doffs its hat to "price suppression" throughout the orders. But repeating the phrase "price suppression" does not change the fact that the Commission's stated concern in the June 2018 Order, the December 2109 Order, and today's orders is

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[34] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 319 ("Even after the June 2018 Order, certain states pursued new or expanded out-of-market support for preferred resources").

[35] Elsewhere in today's orders, the Commission suggests that federal subsidies, presumably in contrast to state subsidies, are as "equally valid" as regulations under the FPA. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 120. There is no basis for the insinuation that state subsidies are somehow less valid than federal ones. Although it is true that state subsidies that directly regulate or aim at the Commission's exclusive jurisdiction or that conflict with a Commission regulation are preempted, *see supra* P 7, the December 2019 Rehearing Order deals with state actions that are concededly not preempted and were enacted pursuant to the states exercise of their reserved authority under the FPA. *See, e.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 76-77. But, although the Commission's "equally valid" rationale is unhelpful as a statement of law, it is a revealing illustration of the attitude toward state authority that pervades the order.

[36] *See supra* P 7.

[37] *EPSA*, 136 S. Ct. at 776 (citing *Oneok*, 135 S. Ct. at 1599).

[38] *Id*.

the states' exercise of their authority under section 201(b) or the fact that the goal of the new MOPR is to "nullify" and "disregard" the effects of state resource decisionmaking. Similarly, the Commission's observation that it is not literally precluding states from building new resources is beside the point. As I explained in my earlier dissent, that is the equivalent of saying that a grounded teenager is not being punished because he can still play in his room—it deliberately mischaracterizes both the intent and the effect of the action in question.[39]

16. The extent to which the Commission is attempting to interfere with state resource decisionmaking is even clearer with a little context. The MOPR was originally used to mitigate buyer-side market power within the wholesale market[40]—a concern at the heart of the Commission's responsibility to ensure that wholesale rates are just and unreasonable.[41] And for much of the MOPR's history, that is what it did. Even when the Commission eliminated the categorical exemption for resources developed pursuant to state public policy, the Commission limited the MOPR's application only to natural gas-fired resources—*i.e.*, those that would most likely be used as part of an effort to decrease capacity market prices.[42]

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[39] December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 13).

[40] Specifically, those early MOPRs were designed to ensure that net buyers of capacity were not able to use market power to drive down the capacity market price. *See N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (2020) (Glick, Comm'r, dissenting at P 2); *see generally* Richard B. Miller, Neil H. Butterklee & Margaret Comes, *"Buyer-Side" Mitigation in Organized Capacity Markets: Time for a Change?*, 33 Energy L.J. 459 (2012) (discussing the history of buyer-side mitigation at the Commission).

[41] *See, e.g., Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277, 1280 (D.C. Cir. 2007) (noting that "FERC's authority generally rests on the public interest in constraining exercises of market power"); *Pub. Util. Dist. No. 1 of Snohomish Cty. v. Dynegy Power Mktg., Inc.*, 384 F.3d 756, 760 (9th Cir. 2004) (explaining that the absence of market power could provide a strong indicator that rates are just and reasonable); *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1004 (D.C. Cir. 1990) ("In a competitive market, where neither buyer nor seller has significant market power, it is rational to assume that the terms of their voluntary exchange are reasonable, and specifically to infer that the price is close to marginal cost, such that the seller makes only a normal return on its investment."); *see also N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (Glick, Comm'r, dissenting at P 2) (explaining that "the Commission's buyer-side market power mitigation regime should focus only on actual market power" a concern that "is both more consistent with the FPA's dual-federalist design and the Commission's core responsibility as a regulator of monopoly/monopsony power").

[42] *See N.J. Bd. of Public Utils. v. FERC*, 744 F.3d 74, 106-07 (3d Cir. 2014)

17. How things have changed. Today, the Commission expressly admits that, for the first time, the MOPR is no longer about buyer-side market power.[43] Instead, as noted, it is all about and only about nullifying the effects of state public policies. That dramatic shift began only in 2018, more than a decade after the MOPR was first employed to mitigate the exercise of market power.[44] The intervening two years have been head-spinning as the Commission has rapidly transformed a narrowly tailored anti-monopsony measure into a regime for blocking state efforts to shape the generation mix.

18. At no point, however, has the Commission been able to coherently justify the MOPR's change of target. It first claimed that this transformation of the MOPR was necessary to ensure "investor confidence" and the ability of unsubsidized resources to compete against resources receiving state support.[45] A few months later, at the outset of this proceeding, the Commission abandoned "investor confidence" and asserted that the need to mitigate state policies in order to protect the "integrity" of the capacity market—another concept that it did not bother to explain.[46] And last December, the Commission added yet another new twist: That state subsidies "reject the premise of the capacity market."[47] But, as with investor confidence and market integrity, it is hard to know exactly what that premise is. Today's orders provide more of the same, reiterating those

(*NJBPU*) (summarizing the Commission's reasoning for limiting the MOPR to only natural gas-fired resources). The Commission asserts, without explanation, that there is a "clear tension" between the 2011 order eliminating the public policy exemption to then-limited MOPR and recent state efforts to shape the generation mix. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 320. Nonsense. The 2011 order specifically exempted all non-natural-gas-fired resources from the MOPR, squarely foreclosing whatever tension the Commission pretends to uncover today. In any case, it is hardly fair to assign states the responsibility for predicting when the Commission will abandon its precedent and entirely reorient its approach to regulating a construct like the PJM capacity market.

[43] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 45 (stating that "the expanded MOPR does not focus on buyer-side market power mitigation").

[44] *See ISO New England Inc.*, 162 FERC ¶ 61,205, at PP 20-26 (2018). That order also came after every existing court case considering the legality of the Commission's use of the MOPR.

[45] *Id.* P 21.

[46] June 2018 Order, 163 FERC ¶ 61,236 at PP 150, 156, 161.

[47] December 2019 Order, 169 FERC ¶ 61,239 at P 17.

buzz words without any further explanation.[48] If there is one thing that those inscrutable terms share, it is their inability to conceal, much less justify, the fundamental shift in the Commission's focus.[49] The Commission's effort to recast the MOPR as always having been about price suppression at some level of generality[50] obfuscates that point and badly mischaracterizes the recent shift in the MOPR's focus.

19. Neither of the Commission's responses provide it much cover. First, the Commission asserts that the new MOPR does not intrude on states' exclusive jurisdiction just because it "affect[s] matters within the states' jurisdiction."[51] Of course that is true; *EPSA* tells as much.[52] But it is also beside the point. My argument—and the arguments made by several parties on rehearing[53]—is that the Commission is exercising its authority

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[48] *E.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 78 (asserting that "[t]he Commission may, as here, take action to protect the integrity of federally-regulated markets against state policies" without explaining what exactly integrity means in this context); *id.* P 320 (explaining that the various exemptions provided for in the December 2019 Order are for "resources that accept the premise of a competitive capacity market" (quoting December 2019 Order, 169 FERC ¶ 61,239 at P 17)); *id.* P 337 (asserting that "[t]he replacement rate directed in the December 2019 Order addresses State-Subsidized Resources, which pose a risk to the integrity of competition in the wholesale capacity market").

[49] Public Power Entities Rehearing Request at 6-7 ("The Commission did not justify the transformation of the MOPR from a limited mechanism aimed at preventing price suppression by subsidized new entry into a sweeping restriction on almost all forms of non-federal support for generation resources.").

[50] December 2019 Order, 169 FERC ¶ 61,239 at 136; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 338 ("[T]he December 2019 Order expands the scope of the MOPR, but not its underlying purpose."). As I noted in my underlying dissent, suggesting that the MOPR has always been about price suppression is the equivalent of saying that speed limits have always been about keeping people from getting to their destination too quickly. There is a sense in which that is true, but it kind of misses the point. December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at n.35).

[51] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 15-16.

[52] *EPSA*, 136 S. Ct. at 776 ("[A] FERC regulation does not run afoul of § 824(b)'s proscription just because it affects—even substantially—the quantity or terms of retail sales.").

[53] *See, e.g.* Public Power Entities Rehearing Request at 13-15; Clean Energy

over wholesale sales to "aim at" or "target" matters subject to exclusive state jurisdiction. As explained above, the "goals" of the new MOPR and the mechanism "through which [it] operates" demonstrate an unmistakable focus on states' exercise of their reserved authority.[54] That means that, unlike the rule in *EPSA*, today's orders are not "all about, and only about, improving the wholesale market."[55] Accordingly, the Court's precedent regarding the incidental effects of a valid exercise of Commission authority are beside the point.

20. In addition, the Commission appears to suggest that it can overstep its jurisdictional bounds only if it *literally* requires states to build certain resources or prevents states from doing the same.[56] In other words, the Commission's theory of the case is that it exceeds its jurisdiction *only* if it directly regulates the construction of new resources. But that suggestion is inconsistent with the Supreme Court's recent cases, including *EPSA*, that make clear that the FPA does not permit federal or state regulators to use their authority in an attempt to interfere with the other's sphere of exclusive jurisdiction by aiming at or targeting the matters peculiarly within that sphere.[57] Accordingly, the Commission's reasoning is both a misapplication of the law and arbitrary and capricious insofar as it utterly misses the point of the argument made by several parties on rehearing.[58]

21. Second, the Commission points to a handful of court of appeals decisions upholding various Commission orders addressing capacity markets. None of those cases sanction the Commission's actions in this proceeding. The December 2019 Rehearing Order contends principally that the U.S. Court of Appeals for the Third Circuit's (Third Circuit) decision in *NJPBU* inoculates the Commission against any charge that it has exceeded its jurisdiction by intruding on state authority over resource decisionmaking.[59]

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Advocates Rehearing Request at 85-89.

[54] *EPSA* 136 S. Ct. at 776-77.

[55] *Id*. at 776.

[56] *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 17.

[57] *See supra* P 7; *EPSA* 136 S. Ct. at 776-77.

[58] *See, e.g.*, Public Power Entities Rehearing and Clarification Request at 13-16; Clean Energy Associations Rehearing and Clarification Request at 10-11; Maryland Commission Rehearing and Clarification Request at 9-13; *see also supra* P 7; December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at PP 7-17).

[59] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 16 ("The court's

That is not how precedent works. Just because a court upheld one order against a particular challenge does not mean that it would uphold all similar orders against other challenges.

22. In any case, the orders in this proceeding bear only a surface-level similarity to *NJBPU*.[60] As the Third Circuit explained, the purpose of the MOPR on review in that case was limited to mitigating the exercise of buyer-side market power[61]—a concern that, as noted, lies at the core of the Commission's authority over wholesale rates and practices.[62] Consistent with that focus, that MOPR applied only to natural gas-fired power plants because they were the resources that a large net buyer of capacity could rationally use to suppress the capacity market clearing price.[63] In that case, the Commission eliminated an "exception" from the MOPR that had previously allowed state-sponsored natural gas-fired units to skirt the MOPR.[64] The Commission justified its decision by pointing to a pair of (ultimately preempted) state laws that subsidized new natural gas plants by effectively guaranteeing them a predetermined wholesale rate.[65]

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decision in *NJBPU* demonstrates that the findings from the December 2019 Order are within the Commission's jurisdiction."); June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 66.

[60] *See supra* PP 16-18 (discussing the MOPR's evolution).

[61] *NJBPU*, 744 F.3d at 84-85. In other words, the "aim" or "target" of the MOPR was limited to the exercise of wholesale market power. *Id.*

[62] *See supra* note 41.

[63] *NJBPU*, 744 F.3d at 106 ("[T]he only resources subject to the MOPR are natural gas-fired technologies."); *id.* ("FERC asserts that the characteristics of gas units make them more likely to be used as price suppression tools." (internal quotation marks omitted)).

[64] *Id.* at 79.

[65] *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61022, at P 139 (2011); *id.* PP 128-138 (discussing the evidence in the record). In *Hughes*, the Supreme Court subsequently held that the Maryland law, which was functionally identical to the New Jersey law, was preempted because it aimed at FERC's exclusive jurisdiction over wholesales. 136 S. Ct. at 1928. That the Commission's elimination of the state resource exemption was both focused exclusively on the exercise of buyer-side market power and in response to a state's "intrusion" on FERC's exclusive jurisdiction, *id.* n.11, only underscores the differences between that decision and today's orders.

The court concluded that all the MOPR did in that case was ensure a "new resource is economical—*i.e.*, that it is needed by the market—and ensures that its sponsor cannot exercise *market power* by introducing a new resource into the auction at a price that does not reflect its costs and that has the effect of lowering the auction clearing price."[66] In addition, in reviewing those facts, the court observed that "FERC's enumerated reasons for approving the elimination of the state-mandated exception relate directly to the wholesale price for capacity."[67]

23. Today's orders are an altogether different animal. As noted above, the December 2019 Rehearing Order explicitly disavows the mitigation of market power as the basis for the new MOPR,[68] instead making it "all about and only about"[69] "nullifying"[70] state efforts to shape the generation mix[71]—or at least those state efforts that the Commission dislikes.[72] As explained above, today's orders—and, indeed, every order in this proceeding—has made clear that the aim of the new MOPR is to "deter" states from

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[66] *NJBPU*, 744 F.3d at 97 (emphasis added).

[67] *Id*.

[68] *See supra* P 7; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 45 ("[T]he expanded MOPR does not focus on buyer-side market power mitigation."); June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 56.

[69] *EPSA*, 136 S. Ct. at 776.

[70] As noted, this is the Commission's own term for describing the effect that applying the MOPR has on a particular policy. December 2019 Order, 169 FERC ¶ 61,239 at P 87. On rehearing, several parties identified the tension between the Commission's assertions that it could not apply the MOPR to federal policies because to do so would "nullify" those policies and its statements that applying the MOPR to state policies has no effect whatsoever. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 12. Although the Commission summarizes some of those arguments, it does not respond to them.

[71] *See supra* P 9 (explaining how the Commission's orders focus only on state efforts to regulate the generation mix and not on other state efforts that could conceivably have the same price suppressive effects). Even PJM, which brought this problem to our doorstep in 2018, criticizes the Commission for abandoning the MOPR's role as "guardrail" and turning it into an "over-broad and over-prescriptive" rule that "needlessly interferes with state resource policies." PJM Rehearing and Clarification Request at 6-9.

[72] *See supra* PP 11-12; *infra* Section II.B.1.d.

taking actions of which the Commission disapproves.[73] That makes today's orders a far cry from *NJBPU.* In addition, the new MOPR mitigates indiscriminately and explicitly does not require that the mitigated state policy actually affect the capacity market clearing price or even be likely to have such an effect.[74] That is distinctly unlike the targeted MOPR in *NJBPU* that addressed only the resources most likely to be used in an exercise of market power.[75] Simply put, the MOPR addressed in today's orders is so fundamentally different from that before the court in *NJBPU* as to render the holding in that case next to meaningless as applied to these orders.

24. The Commission also suggests that the D.C. Circuit's decisions in *Connecticut Department* and *Municipalities of Groton* support today's outcome.[76] But those cases have even less in common with the facts before us than *NJBPU.* In both instances, the court upheld the Commission's authority to require wholesale buyers to purchase particular quantities of capacity.[77] As the Court explained in *Connecticut Department*, the Commission's focus was squarely on market structures that would motivate utilities to develop or acquire the necessary capacity.[78] But the Court went out of its way to explain that nothing in the Commission's orders in any way limited the states' ability to *influence* or, indeed, directly select the resources that would meet those capacity requirements.[79] And that is where any superficial similarity to today's orders ends. As noted, the new MOPR is expressly about limiting—"nullify[ing]" to use the

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[73] *See supra* P 14.

[74] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 132.

[75] Public Power Entities Rehearing Request at 15 (The "expansion of the MOPR fundamentally alters its purposes and impact in a way that impermissibly intrudes on state authority.").

[76] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 15 & n.45 (citing *Conn. Dep't of Pub. Util. Control v. FERC*, 569 F.3d 477, 481-82 (D.C. Cir. 2009) and *Muns. of Groton v. FERC*, 587 F.2d 1296, 1301 (D.C. Cir. 1978)).

[77] *Connecticut Dep't*, 569 F.3d 481-85; *id.* at 482 (explaining that *Municipalities of Groton* "sustained the Commission's jurisdiction to review the 'deficiency charges' . . . charged . . . when member utilities failed to live up to their share of NEPOOL's reliability requirement").

[78] *Id.* at 482.

[79] *Id.*

Commission's word[80]—state efforts to shape the resources that meet those requirements.[81] What is more, that nullification is the express reason for of the Commission's action: The orders' goal is to block the effects of state policies and deter states from exercising their authority over generation facilities.[82]

25. Finally, it is important to be precise about my jurisdictional argument. I do not believe that any MOPR is *per se* invalid just because it complicates state efforts to regulate generation facilities.[83] After all, *NJBPU* indicates that the use of a MOPR that addresses matters squarely within the Commission's authority is permissible, at least in certain circumstances.[84] But that is not what we have here. As explained above, today's orders confirm that the Commission is deploying its new MOPR to aim at state resource decisionmaking and for the purpose of substituting its own policy preferences for those of the states. That "fatal defect" renders this particular MOPR in excess of the Commission's jurisdiction.[85]

## II. The Commission's Orders Are Arbitrary and Capricious

26. Today's orders are also arbitrary and capricious. The upshot of the majority's position is that PJM's capacity market is a just and reasonable construct *only* if the Commission "nullifies" the effects of state public policies. That interpretation of the FPA is as radical as it is wrong and finds no support in the 80-year history of the Act or in any

[80] December 2019 Order, 169 FERC ¶ 61,239 at PP 10, 89.

[81] *See supra* P 10.

[82] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 319. The Commission is also fond of pointing to the U.S. Court of Appeals for the Seventh Circuit's statement, in resolving preemption litigation regarding Illinois's zero-emissions credits, that the Commission has the authority to make "adjustments" to its regulations in light of state action. *Star*, 904 F.3d at 524. And indeed it does. But it does not follow that the Commission can make *any* "adjustment" that it wants, certainly not one inconsistent with Supreme Court's holdings on the limit of federal authority under the FPA.

[83] As I have elsewhere explained, the proper role for MOPRs is in combatting exercises of market power, not state efforts to shape the generation mix. *N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (2020) (Glick, Comm'r, dissenting at PP 15-16).

[84] *NJBPU*, 744 F.3d at 96-98.

[85] *Cf. Hughes*, 136 S. Ct. at 1299.

Commission or court precedent.[86] I suppose it should be no surprise that installing such an unprecedented mitigation regime proves to be a difficult task. But that is no excuse for an order riddled with determinations that are unsupported by the record and deeply arbitrary and capricious. The whole purpose of the Administrative Procedure Act is to prevent an agency from relying on fundamentally flawed reasoning in order to impose its policy preferences. If ever those protections were needed to address an action of the Commission, it is this one, both because of the shoddy reasoning on which the Commission's actions are based and the tremendous damage they may ultimately do. In the following sections, I detail several of what I view to be the most serious flaws in the Commissions reasoning, any of which should be sufficient to invalidate today's orders.

### A. The Commission Has Not Shown that the Existing Rate Was Unjust and Unreasonable

27. Section 206 of the FPA requires the Commission to show that the existing rate is unjust and unreasonable or unduly discriminatory or preferential before it can set a replacement rate.[87] The June 2018 Rehearing Order fails to articulate a reasoned basis for concluding that the pre-existing capacity market rules were unjust and unreasonable or unduly discriminatory or preferential. Instead, the Commission doubles down on a conclusory theory of the case that does not seriously wrestle with the contrary arguments and evidence in the record.

28. The June 2018 Rehearing Order does not rely on any evidence that state policies are actually distorting prices, much less that they are doing so in a way that imperils resource adequacy in the region. Instead, the Commission's case rests on two propositions: (1) that certain state subsidies permit resources to lower their capacity

[86] The December 2019 Order also swept beyond what was contemplated in the original *Calpine* complaint by suggesting that voluntary commercial transactions involving renewable energy credits (RECs) would constitute a state-subsidized transaction and be subject to the MOPR. In response, several parties sought late intervention, which the Commission denies. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 4. I would have granted those interventions. The December 2019 Order took an approach to mitigation that was far broader than any that had been contemplated to date in this proceeding and, indeed, in the Commission's history. Under those circumstances, we would be better served by letting would-be parties have their full say, rather than forcing them to sit on the sidelines.

[87] *Emera Maine v. FERC*, 854 F.3d 9, 25 (D.C. Cir. 2017) ("[A] finding that an existing rate is unjust and unreasonable is the 'condition precedent' to FERC's exercise of its section 206 authority to change that rate." (quoting *FPC v. Sierra Pac. Power Co.*, 350 U.S. 348, 353 (1956))).

market offers, which, if enough resources do it, will lower the clearing price[88] and (2) that the number of potentially subsidized megawatts in PJM appears likely to grow in coming years.[89] That is the entirety of the Commission's theory. And that is not enough, on this record, to reasonably conclude that PJM's existing tariff was unjust and unreasonable or unduly discriminatory or preferential.

29. As numerous parties argued on rehearing, the idea that resource adequacy in PJM is currently imperiled by state subsidies is, frankly, laughable. The Base Residual Auction has consistently procured more resources than required to meet PJM's reliability requirement and thousands of megawatts of additional resources have elected not to retire, even though they are not receiving any capacity market payment.[90] If state policies are, in fact, a threat to resource adequacy, there is certainly no evidence of that in PJM's current reserve margins. Instead, as discussed in some detail in another statement I am issuing today, if there is a problem in PJM's capacity market, it is not that prices are too low, but rather that the market is designed to produce prices that are too high, over-procuring capacity and dulling the price signals in the energy and ancillary service markets.[91] Faced with that fact, the Commission responds with the assertion that state subsidies will surely cause a problem in the future.[92] Maybe, but there is no evidence in

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[88] *E.g.*, June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 28 ("It is axiomatic that resources receiving out-of-market subsidies need less revenue from the market than they otherwise would. The rational choice for such resources, given their need to participate in PJM's capacity market, is to reduce their offers commensurably to ensure they clear in the market.").

[89] *E.g.*, *id.* P 29 ("Rather, the June 2018 Order emphasized the significant and continued growth of out-of-market support. As this growth continues, more subsidized resources will have the ability to offer below their costs and suppress prices" (footnotes omitted)).

[90] *See, e.g.*, Joint Consumer Advocates June 2018 Order Rehearing Request at 8 (citing PJM 2021/2022 RPM Base Residual Action Results at 1, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx (2021/2022 BRA Summary)); *see also* 2021/2022 BRA Summary ("The 2021/2022 Reliability Pricing Model (RPM) Base Residual Auction (BRA) cleared 163,627.3 MW of unforced capacity in the RTO *representing a 22.0% reserve margin*." (emphasis added)).

[91] *See PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,040 (2020) (Glick, Comm'r. dissenting).

[92] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 29-30.

this record that suggests that state policies will cause any resource adequacy concerns whatsoever.

30. Apparently recognizing that point, the Commission pivots to economic theory as the basis for its action.[93] It is true that the Commission need not prove *basic* economic principles every time that it seeks to act on them. After all, "[a]gencies do not need to conduct experiments in order to rely on the prediction that an unsupported stone will fall."[94] Instead, agencies can rely on economic theory to make predictive judgments about how the future will play out.[95] But that does not mean that an agency can turn "economic theory" into a "talismanic phrase that does not advance reasoned decision making" and claim to have satisfied its obligations under the APA.[96] In other words, an agency cannot articulate a principle, label it "economic," make a prediction, and move on without wrestling with contrary record evidence or reasonable alternative applications of that economic theory.

31. But that is exactly what the June 2018 Rehearing Order does. It asserts that state subsidies in PJM are increasing, that subsidies reduce the costs of the resource being subsidized and, therefore, subsidies will cause more subsidized resources to clear the capacity market. All true. From that though, the Commission concludes that PJM's tariff will no longer ensure resource adequacy at rates that are just and reasonable and not unduly discriminatory or preferential, which is where its reasoning gets a little tenuous, as the economic principle articulated does not lead ineluctably to the regulatory conclusion reached. Instead, the record is replete with evidence and reasonable theories that could support an alternative conclusion. For one thing, the evidence in the record of continued high prices and entry of new resources (not to mention, retention of old ones) could just as easily support the conclusion that a more-than-adequate quantity of

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[93] *E.g.*, *id.* PP 25, 27, 29, 34, 37.

[94] *Assoc. Gas Distributors v. FERC*, 824 F.2d 981, 1008 (D.C. Cir. 1987). I cannot help but note the mild irony that the rest of that example of an assumable economic theory is that "competition will normally lead to lower prices," *id.* at 29, while the Commission's theory of the case today rests on the supposedly urgent need to raise prices.

[95] *See, e.g.*, *NextEra Energy Res., LLC v. FERC*, 898 F.3d 14, 23 (D.C. Cir. 2018); *S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41, 65, 76 (D.C. Cir. 2014) ("[A]t least in circumstances where it would be difficult or even impossible to marshal empirical evidence, the Commission is free to act based on reasonable predictions rooted in basic economic principles.").

[96] *TransCanada Power Mktg. Ltd. v. FERC*, 811 F.3d 1, 13 (D.C. Cir. 2015).

resources will remain in the market, state subsidies notwithstanding.[97] As numerous parties point out, that has been the experience to date in PJM.[98] Why the Commission is so confident that things will change at some undefined future inflection point is never explained. Nor does the Commission explain why it is confident that those assumed effects justify an increase in customer's rates.

32. In addition, it is equally reasonable to suggest that the natural effect of state subsidies (indeed, in many cases, their intended result) will be to bring online large amounts of new resources that will themselves help to ensure resource adequacy.[99] Nothing in today's orders explains why the Commission is so confident that the deployment of state-sponsored resources will impair PJM's ability to ensure resource adequacy at just and reasonable rates rather than enhancing it. After all, it is worth remembering that, as discussed above, the FPA expressly reserved the regulation of generation facilities to the states and Congress presumably expected the states to wield that reserved authority.[100] Why the exercise of that authority is inherently unjust and unreasonable or a "problem" in need of "solving" is never clearly explained. Repeated incantations of the phrase "economic theory" does not provide a reasoned answer to the question.

33. The closest the Commission comes to explaining its confidence in a looming future problem is its series of elliptical statements about investor confidence and the merchant business model. Throughout this proceeding, the Commission has relied on

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[97] Today's orders contain several variations on the notion that "adequate reserve margins today do not necessarily mean that such conditions will continue into the future." June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 35. Sure. But the burden of proof is on the Commission to show that the current tariff is unjust and unreasonable, not on proponents of the status quo to show that the tariff will necessarily remain just and reasonable in perpetuity. *See Emera Maine*, 854 F.3d at 24 ("'The proponent of a rate change under section 206, however, bears "the burden of proving that the existing rate is unlawful.'" (quoting *Ala. Power Co. v. FERC*, 993 F.2d 1557, 1571 (D.C. Cir. 1993)).

[98] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 16-17.

[99] It is certainly possible that the entry of those resources will lower the capacity market clearing price, which should not necessarily be a bad result in the eyes of an agency whose "primary purpose" is to protect customers. *See, e.g.*, *City of Chicago, Ill. v. FPC*, 458 F.2d 731, 751 (D.C. Cir. 1971) ("[T]he primary purpose of the Natural Gas Act is to protect consumers." (citing, *inter alia*, *City of Detroit v. FPC*, 230 F.2d 810, 815 (1955)).

[100] *See supra* P 5.

various inscrutable principles, such as "investor confidence" or "market integrity," to justify its new MOPR.[101] At various points in the June 2018 Order, and again today, the Commission expressed concern about the challenges state policymaking may create for investors in particular resources in the capacity market[102] and the June 2018 Rehearing Order specifically raises the concern that state policies may harm unsubsidized generators.[103] These statements seem to suggest that the problem with the state policies is that they may reduce the profit margins of unsubsidized resources and make it correspondingly less likely investors will pour their money into those resources, which the Commission assumes will impair resource adequacy.

34. I recognize and appreciate the large influx of capital that investors and the merchant business model, more generally, have brought to PJM over the last two decades. Those investments have enhanced the grid's reliability while helping to decrease its carbon intensity—both good outcomes. But it is not our responsibility to protect particular businesses, business models, or their investors from state regulation. If states choose to address a market failure by promoting particular resource types or business models over others, it is not for the Commission to give a leg up to business models that might lose out as a result. In any case, PJM's generation resource mix has long reflected a mix of vertically integrated utilities and merchant generators, both of which have benefited from public policies. The June 2018 Rehearing Order does not adequately explain the Commission's apparent confidence that that cannot continue in a future in which states continue to exercise their authority under FPA section 201(b).

35. The Commission also makes the assertion that state policies are a problem because they create "significant uncertainty" and "investors cannot predict whether their capital will be competing" against subsidized resources.[104] As I explained in my dissent from the June 2018 Order, uncertainty about regulation will always be endemic in a regulated industry.[105] And nothing in the June 2018 Order or the June 2018 Rehearing Order

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[101] *Supra* P 18.

[102] *E.g.*, June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 35 ("[I]nvestors may be hesitant to invest in a market where both new entry and the viability of uneconomic existing resources is dictated largely by state subsidy programs."); June 2018 Order, 163 FERC ¶ 61,236 at P 150 (similar).

[103] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 28 (noting the potential that state policies will "injure[] non-subsidized competitors").

[104] June 2018 Order, 163 FERC ¶ 61,236 at P 150.

[105] *Id.* (Glick, Comm'r, dissenting at 11)

explains why the purported uncertainty caused by state policymaking is more problematic than the other forms of uncertainty that pervade the industry.

36. The bottom line is that neither the June 2018 Order nor today's order on rehearing has adequately explained why the existing tariff is unjust and unreasonable or unduly discriminatory or preferential. The sum total of the Commission's analysis is that the PJM states will likely, in the future, subsidize more generating resources and that, all else equal, those subsidies will cause those resources to offer into the capacity market at lower prices than they would otherwise. But that alone does not prove the existing tariff is unjust and unreasonable, especially given the long history of state policies affecting the capacity market and the equally plausible future scenarios in which the capacity market continues to ensure resource adequacy at just and reasonable rates while state-sponsored resources co-exist with other business models. After all, to carry its burden under section 206, the Commission must do more than articulate a theory, label it "economics," and call it a day.

### B. <u>The Commission Has Not Shown that Its Replacement Rate Is Just and Reasonable</u>

37. If the Commission meets its burden to show that the existing rate is unjust and unreasonable or unduly discriminatory or preferential, then the burden is again on the Commission to establish a "replacement rate" that is itself just and unreasonable and not unduly discriminatory or preferential.[106] The December 2019 Rehearing Order fails to articulate a reasoned basis for concluding that the new MOPR meets that burden. Instead, like the June 2018 Rehearing Order, it doubles down on a conclusory statements that do not seriously wrestle with the contrary arguments and evidence in the record.

#### 1. <u>The Commission's Definition of State Subsidy Is Arbitrary and Capricious</u>

38. The crux of the December 2019 Order, and today's order on rehearing, is the Commission's definition of subsidy. That definition, however, is also the source of many of the Commission's most arbitrary and capricious determinations. Simply put, it is little

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[106] *Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656, 663 (D.C. Cir. 2017) ("When the Commission changes an existing filed rate under section 206, it is 'the Commission's burden to prove the reasonableness of its change in methodology.'" (quoting *PPL Wallingford Energy L.L.C. v. FERC*, 419 F.3d 1194, 1199 (D.C. Cir. 2005))); *see also Emera Maine*, 854 F.3d at 27 ("'Although it is not our role to tell the Commission what the correct rate of return calculation is . . . we do have an obligation to remand when the Commission's conclusions are contrary to substantial evidence or not the product of reasoned decisionmaking.'" (quoting *Pub. Serv. Comm'n of N.Y. v. FERC*, 813 F.2d 448, 465 (D.C. Cir. 1987))).

more than a series of arbitrary lines that do not comport with the Commission's explanation for why the existing tariff was unjust and unreasonable or why the new MOPR will produce a just and reasonable rate.

**a. Excluding Federal Subsides Is Arbitrary and Capricious**

39. No single determination is in today's orders is more arbitrary than the Commission's exclusion of all federal subsidies from the new MOPR.[107] Federal subsidies have pervaded the energy sector for more than a century, beginning even before Congress, in the FPA, declared that the "business of transmitting and selling electric energy . . . is affected with a public interest."[108] Since 1916, federal taxpayers have supported domestic exploration, drilling, and production activities for our nation's fossil fuel industry.[109] And since 1950, the federal government has provided roughly a trillion dollars in energy subsidies, of which 65 percent has gone to fossil fuel technologies.[110] Those federal policies present all the same "problems" that the Commission identifies with state policies. They have "artificially" reduced the price of natural gas, oil, and coal, which in turn has allowed resources that burn these fuels—including many of the so-called "competitive" resources that stand to benefit from today's orders—to submit "uncompetitive" bids into PJM's markets. By lowering the marginal cost of fossil fuel-fired units, federal policies have allowed those units to operate more frequently and have encouraged the development of more of those units than would otherwise have been built.

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[107] December 2019 Order, 169 FERC ¶ 61,239 at P 89; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 118-120.

[108] 16 U.S.C. § 824.

[109] *See* Molly Sherlock, Cong. Research Serv., *Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures* 2-3 (May 2011), *available at* https://fas.org/sgp/crs/misc/R41227.pdf (Energy Tax Policy).

[110] *See* Nancy Pfund and Ben Healey, DBL Investors, *What Would Jefferson Do? The Historical Role of Federal Subsidies in Shaping America's Energy Future*, (Sept. 2011), *available at* http://www.dblpartners.vc/wp-content/uploads/2012/09/What-Would-Jefferson-Do-2.4.pdf; *New analysis: Wind energy less than 3 percent of all federal incentives*, Into the Wind: The AWEA Blog (July 19, 2016), https://www.aweablog.org/14419-2/ (citing, *inter alia*, Molly F. Sherlock and Jeffrey M. Stupak, *Energy Tax Incentives: Measuring Value Across Different Types of Energy Resources*, Cong. Research Serv. (Mar. 19, 2015), *available at* https://fas.org/sgp/crs/misc/R41953.pdf; The Joint Committee on Taxation, *Publications on Tax Expenditures*, https://www.jct.gov/publications.html?func=select&id=5 (last visited Apr. 16, 2020)) (extending the DBL analysis through 2016).

Indeed, those subsidies, even ones that have subsequently lapsed, are a major reason why many of the current resources in PJM are able to bid into the capacity market at the levels they do.

40. Federal subsidies remain pervasive in PJM. The federal tax credit for nonconventional natural gas[111] sparked the shale gas revolution, triggering a steep decline in natural gas prices, which, in turn, drove the spike in new natural gas-fired power plants starting in the early 2000s. Similarly, federal subsidies such as the percentage depletion allowance and the ability to expense intangible drilling costs have shaved billions of dollars off the cost of extracting coal and natural gas—two of the principal sources of electricity in PJM.[112] In addition, the domestic nuclear power industry would not exist without the Price-Anderson Act, which saves nuclear power generators billions of dollars through indemnity limits that enable them to secure financing and insurance at rates far below their true cost.[113] Federal subsidies have also promoted the growth of renewable resources through, for example, the production tax credit (largely used by wind resources)[114] and the investment tax credit (largely used by solar resources).[115] These and other federal government interventions have had a far greater "suppressive" impact on the capacity market than the "state subsidies" targeted by today's orders, especially when

[111] Energy Tax Policy at 2 n.3. That credit has lapsed. *Id.* at 18.

[112] The Joint Committee on Taxation, Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022 at 21-22 (2018); Monitoring Analytics, *Analysis of the 2021/2022 RPM Base Residual Auction: Revised* 95 (2018), *available at* https://www.monitoringanalytics.com/ reports/Reports/2018/ IMM_Analysis_ of_the_20212022_RPM_BRA_Revised _20180824.pdf (Market Monitor 2021/2022 BRA Analysis) (reporting that coal, natural gas, and nuclear collectively make up more than three-quarters of the generation mix in PJM); *see generally* Molly Sherlock, Cong. Research Serv., Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures 2-6 (May 2011) (discussing the history of energy tax policy in the United States).

[113] 42 U.S.C. § 2210(c).

[114] U.S. Department of Energy, 2018 Wind Technologies Market Report 70, *available at* http://eta-publications.lbl.gov/sites/default/files/ wtmr_final_for_posting_8-9-19.pdf (last viewed Apr. 16, 2020).

[115] Solar Energy Industries Assoc., *History of the 30% Solar Investment Tax Credit* 3-4 (2012), https://www.seia.org/sites/default/files/resources/ History%20of%20ITC%20Slides.pdf.

you consider that resources having benefited from them make up the vast majority of the cleared capacity in PJM.[116]

41. Nevertheless, today's order affirms the December 2019 Order's decision to exclude all federal subsidies from the new MOPR on the theory that the Commission lacks the authority to "disregard or nullify the effect of federal legislation."[117] It is true that the FPA does not give the Commission the authority to undo other federal legislation. But the Commission's defense of applying the new MOPR to state policies is that it neither disregards nor nullifies those policies, but instead addresses only the effects that those policies have on the PJM market.[118]

42. "[T]he Commission cannot have it both ways."[119] If the MOPR disregards or nullifies federal policy, then it must do the same to state policy. And if it does not nullify or disregard state policy, then the Commission's justification for exempting federal subsidies collapses. The Commission, however, does not even attempt to explain its conclusion that applying the new MOPR to state policies respects authority, but applying it to federal policies would "disregard" or "nullify" federal authority. The failure to address, much less resolve, that tension is arbitrary and capricious.

43. Instead of confronting this tension, the December 2019 Order cited to a number of cases for well-established canons of statutory interpretation, such as that the general cannot control the specific and that federal statutes must, when possible, be read

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[116] Market Monitor 2021/2022 BRA Analysis 95 (reporting that coal, natural gas, and nuclear collectively make up more than three-quarters of the generation mix in PJM).

[117] December 2019 Order, 169 FERC ¶ 61,239 at P 87; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 119.

[118] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 16, 17, 19; December 2019 Order, 169 FERC ¶ 61,239 at PP 7, 40; June 2018 Order, 163 FERC ¶ 61,236 at P 153. The December 2019 Rehearing Order shies away from the words "nullify" and "disregard" that it used (quite accurately) in the underlying order. I can understand why. Those terms so clearly laid bare the glaring inconsistencies in the Commission's effort to explain why the MOPR did not target state authority, but could not legally be applied to federal subsidies. Nevertheless, the rationale in today's order is the same: The new MOPR cannot be applied to federal subsidies because doing so would somehow contravene an act of Congress, which is precisely the result that the Commission insists it would not have on state policies.

[119] *Atlanta Gas Light Co. v. FERC*, 756 F.2d 191, 198 (D.C. Cir. 1985); *Cal. ex rel. Harris v. FERC*, 784 F.3d 1267, 1274 (9th Cir. 2015) (same).

harmoniously.[120] Today's order does the same.[121] But those general canons do not help much. They discuss rules of statutory interpretation that are not disputed here and they certainly do not give the Commission license to pretend that the new MOPR has one type of effect on state policies and another type on federal policies.[122] In any case, if we assume, for the sake of argument, that the Commission's benign characterization of the effect of the new MOPR on state policies is accurate,[123] then no number of interpretive canons can cure the Commission's arbitrary refusal to apply the MOPR to federal subsidies.

44. In addition, the Commission asserts that it may treat state and federal subsidies differently because it "has a reasonable basis to distinguish federal subsidies and State Subsidies, that is, whether the subsidies were established via federal law or state law."[124] But that tautology is not as helpful as it might at first seem. Just as not all discrimination is undue, irrelevant differences do not make parties dissimilarly situated.[125] Today's order does not coherently explain why the difference between federal and state subsidies is relevant to its theory of the case.

45. The Commission's apparent belief—implicit today, but stated explicitly in the December 2019 order—is that resources that receive federal subsidies are not similarly situated to resources that receive state subsidies because the Commission cannot nullify

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[120] December 2019 Order, 169 FERC ¶ 61,239 at n.177.

[121] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 120.

[122] Today, the Commission tries a slightly different tack, responding to rehearing requests raising this very point with the assertion that the cited canons "reflect judicial guidance regarding the appropriate way to reconcile Congressional directives." December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 120. No doubt they do, but all the interpretive canons in the world cannot explain why it is rational to pretend that applying the MOPR to a federal subsidy has an inherently different effect than applying it to a state subsidy.

[123] To be clear, I vehemently disagree that is, but I'll indulge the hypothetical for the moment.

[124] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 119.

[125] *Complex Consol. Edison Co. of N.Y. v. FERC*, 165 F.3d 992, 1013 (D.C. Cir. 1999) ("'Differences . . . based on *relevant, significant* facts which are explained are not contrary to the NGA.'" (quoting *TransCanada Pipelines Ltd. v. FERC,* 878 F.2d 401, 413 (D.C. Cir. 1989)) (emphasis added)).

or disregard federal policies, but can do that to state subsidies.[126] Putting aside whether that is true,[127] that line of reasoning just brings us back to square one as it relies on an unexplained distinction in the differing effects that the MOPR has on state and federal policies.

### b. Treating Any Revenue or Other Funding Tangentially Related to a State Law As a Subsidy Is Arbitrary and Capricious

46. As discussed at the outset, the FPA divides jurisdiction between the Commission and the states, envisioning an important role for both in ensuring that the electricity sector is regulated in a manner consistent with the public interest. As the Commission explains, Congress enacted Title II of the FPA to fill the "*Attleboro* Gap" by "allow[ing] the federal government to step in and regulate interstate transactions over which no single state had authority to regulate."[128] And while the FPA did more than just "fill the gap,"[129] it was nevertheless "'drawn with meticulous regard for the continued exercise of state power.'"[130] It would be strange if, having so "meticulous[ly]" preserved state authority, Congress believed that the "continued exercise of" that authority would become inherently a problem.[131]

47. And yet that is precisely what the December 2019 Rehearing Order does. It treats many fundamental elements of state regulation as impermissible subsidies simply because the state is involved. Even putting aside the jurisdictional problems with that approach,[132] today's order does not explain why it is just and reasonable to mitigate any

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[126] December 2019 Order, 169 FERC ¶ 61,239 at P 89; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 118-119 & n.298.

[127] *See supra* Section I.

[128] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at n.298.

[129] *New York v. FERC*, 535 U.S. 1, 6 (2002) ("[W]hen it enacted the FPA in 1935, Congress authorized federal regulation of electricity in areas beyond the reach of state power, such as the gap identified in *Attleboro*, but it also extended federal coverage to some areas that previously had been state regulated." (footnotes omitted)).

[130] *Zibelman*, 906 F.3d at 50 (quoting *Rochester Gas & Elec. Corp. v. Pub. Serv. Comm'n of N.Y.*, 754 F.2d 99, 104 (2d Cir. 1985)).

[131] *See supra* note 10 and accompanying text.

[132] *See supra* Section I.

resource that is affected by many of the most foreseeable consequences of the FPA's jurisdictional framework. Nor does it make any effort to consider the litany of practical challenges and complications that that approach creates, even though many of them were squarely presented on rehearing.

48. Take the example of state default service auctions. As PJM explained in its rehearing request, state default service auctions are state-directed "mechanisms by which load-serving entities in retail choice states acquire obligations to provide energy and related services to retail customers."[133] In layman's terms, that means that they are a market-based mechanism for ensuring that all retail customers have access to reliable and affordable electricity. As the New Jersey Board of Public Utilities—which oversees one of these auctions—explained, these mechanisms are best viewed as hedging constructs that help ensure that state-regulated retail suppliers have access to reliable electricity without wild swings in price.[134] In New Jersey's case, the default service auction is a voluntary mechanism that will rarely, if ever, produce a state-regulated contract with an actual generator (as opposed to a power marketer—*i.e.*, a middle man) or support the retention or new entry of particular resources[135]—details that are apparently too complicated or too inconvenient for the Commission to wrestle with. Today's order finds that a state default service auction qualifies as a State Subsidy because it is a state sponsored process that results in indirect payments to various resources.[136]

49. It is not clear from the record before us exactly how far reaching this decision will be. New Jersey alone serves over 7,000 MW of retail load through its BGS auctions,[137] and every indication is that other retail-choice states have similar mechanisms.[138] To start with, the District of Columbia Public Utility Commission and Pennsylvania Public Utility Commission sought clarification and rehearing of the December 2019 Order, understandably concerned that it could mean that *any* resource that serves load in those

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[133] PJM Rehearing and Clarification Request at 23.

[134] New Jersey Board Rehearing Request at 47-48.

[135] *Id.* at 48.

[136] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 386.

[137] *See The 2019 BGS Auctions*, www.bgs-auction.com http://www.bgs-auction.com/documents/ 2019_BGS_Auction_Results.pdf (last viewed Apr. 16, 2020).

[138] *See, e.g.*, New Jersey Board Rehearing Request at n.260 ("New Jersey is not alone; PJM's other restructured states follow models similar to the BGS construct.").

states would be subject to the Commission's administrative pricing regime.[139] In addition, Maryland runs a similar default service auction that procures service for over 50 percent of the state's retail load.[140] Delaware too has a default service auction, which cleared over 500 MW in the most recent auction.[141] Additionally in Ohio each utility has its own Standard Service Offer auction for retail load.[142] It quickly becomes clear that state default auctions are a commonplace in retail choice states and can often be used to meet the needs of upwards of 50% of retail load. The Commission's decision to label these auctions—which sometimes cover more than half a state's retail load—state subsidies could have sweeping consequences for the retail-choice states that make up the majority of PJM states.

50. And is if that were not bad enough, the Commission makes no effort to wrestle with the practical challenges of its edicts. As the New Jersey Board explained in its rehearing request, the "suppliers" in New Jersey's default service auction are generally power marketers that rely on either financial or physical hedging and are not necessarily backed by particular physical generators.[143] Do the Commission's statements in today's orders mean that PJM, the Market Monitor, or someone else will have to chase down every resource power marketers use to satisfy a default service auction contract? In

[139] DC Commission Rehearing and Clarification Request at 1-3; Pennsylvania Commission Rehearing and Clarification Request at 13. As noted, PJM also sought clarification, arguing that "it is not apparent how these auctions amount to a State Subsidy." PJM Rehearing and Clarification Request at 23.

[140] See Maryland Public Service Commission, Report to the Governor and the Maryland General Assembly on the Status of Standard Offer Service, the Development of Competition, and the Transition of Standard Offer Service to a Default Service at 5-6 (Dec. 31, 2018), *available at* https://www.psc.state.md.us/wp-content/uploads/Final-Competition-Report.pdf (discussing Maryland's default service auction).

[141] *See* James Letzelter, The Liberty Consulting Group, Inc., Delmarva Power & Light's 2020 Request for Proposals for Full Requirements Wholesale Electric Supply for Standard Offer Service (2020), *available at* https://depsc.delaware.gov/wp-content/uploads/sites/54/2020/02/Liberty-DE-PSC-Technical-Consultant-Final-Report-02-19-2020.pdf.

[142] *See How are electric generation rates set?* https://www.puco.ohio.gov/be-informed/consumer-topics/how-are-electric-generation-rates-set/ (last viewed Apr. 16, 2020).

[143] New Jersey Board Rehearing Request at 48; *see* Pennsylvania Commission Rehearing and Clarification Request at 13.

addition, default service auctions generally do not align with PJM's annual single-delivery-year capacity auctions. For example, in New Jersey the auction runs annually and covers only one-third of load at time, but with three year contracts.[144] In the District of Columbia the auctions are held annually.[145] And in Pennsylvania they are run "quarterly, or every 6 months."[146] How will PJM, the Market Monitor, or the Commission sort out which resources are to be mitigated in PJM's Base Residual Auction based on those differing state calendars?

51. I find the failure to carefully consider these impacts on a fundamental aspect of state regulation particularly troubling. This Commission has rightly enjoyed a reputation for focusing on the technical and arcane elements of providing reliable electricity at just and reasonable rates rather than on making broad policy pronouncements. Today's orders will do much to damage that reputation. It makes clear that the Commission is uninterested in the effects its orders may have on how states carry out their basic responsibilities. Instead, it is comfortable pursuing its quixotic quest to rid the wholesale market of state subsidies and leave it to the states to pick up the pieces.

### c. <u>Excluding State Actions That May Equally "Suppress" Prices Is Arbitrary and Capricious</u>

52. Although the definition of state subsidy is overbroad, it is also irrational. Today's order on rehearing affirms the December 2019 Order's unreasoned distinctions drawn among different state public policies. In particular, the Commission expressly excludes state industrial development policies and local siting subsidies from its definition of state subsidy.[147] The rationale, while murky, seems to be that those policies are "too attenuated" from the wholesale rate to constitute an impermissible state policy while other state policies, even ones with a lesser effect on the wholesale rate, are somehow more closely related.[148] That distinction is neither reasonable nor reasonably explained.

53. Let's begin with the fact that the distinction drawn is inconsistent with the Commission's rationale for the new MOPR. As discussed, throughout this proceeding the Commission has asserted that the problem with state policies is their ability to

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[144] *See Overview* http://www.bgs-auction.com/ bgs.auction.overview.asp (last visited Apr. 16, 2020) (describing New Jersey's default service auction).

[145] DC Commission Rehearing and Clarification Request at 2.

[146] Pennsylvania Commission Rehearing and Clarification Request at 13.

[147] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106.

[148] *Id.*

"suppress" the wholesale rate.[149] And, in the December 2019 Rehearing Order, the Commission again dismisses arguments that the MOPR should apply only to state policies that materially affect the capacity price.[150]

54. That is irrational. "General industrial development" policies, such as reduced tax rates, can have an enormous effects on resources' going forward costs, leading resources to "reduce their offers commensurately to ensure they clear the market," exactly the way the Commission described state policies that are subject to the new MOPR.[151] Moreover, the ubiquity and potential cumulative effect of these programs—which the Commission does not contest[152]—would seem to suggest that they represent exactly the sort of threat to "market integrity" about which the Commission's purports to be so concerned.[153] If today's orders were actually concerned about the price suppressive effects of state policies, general industrial development and local siting policies would have to be front and center in any rational response. The fact that they are not shows the extent to which the new MOPR is a campaign to stamp out disfavored state efforts to shape the generation mix and not to address capacity prices themselves.

55. The Commission's effort to justify that arbitrary line drawing only underscores the point. The Commission again asserts that the new MOPR is aimed only at state policies

[149] *E.g. id.* PP 36, 55, 224.

[150] *Id.* P 130.

[151] *See id.* P 38; *see also id.* P 130 (rejecting PJM's proposed materiality threshold because "out-of-market support at any level is capable of distorting capacity prices").

[152] At no point in today's order or the December 2019 Order does the Commission suggest that state industrial development or siting support programs are likely to have less of an effect on wholesale rates than the other state policies targeted by the new MOPR. *See, e.g., id.* PP 106-108 (discussing the justification for excluding these policies from the new MOPR).

[153] *Id.* PP 20, 301. In any case, the District of Columbia Attorney General's rehearing request details how these programs can provide enormous financial benefits to generators, significantly decreasing their capacity market offers in a way that affects the capacity market rate every bit as much as the state policies targeted by today's orders. DC Attorney General Rehearing Request at 22-24. In addition, that rehearing request explained how these supposed "generic" subsidies are, in fact, often deployed for the purpose of subsidizing particular resources. *Id.* at 23-24; *see* Clean Energy Associations Rehearing and Clarification Request at 40-41. The Commission's response that general industrial development policies are categorically "too attenuated" to constitute a state subsidy for the purposes of the MOPR fails to wrestle with the evidence and arguments showing the opposite to be true.

that are "most nearly . . . directed at or tethered to the" wholesale rate.[154] But as discussed above, that awkward repurposing of a preemption term of art does not make things any clearer.[155] It certainly does not explain why it is rational for the Commission to apply the new MOPR only to those state policies that it believes are close-to-but-not-preempted[156] or why the degree of "attenuation" is relevant in a proceeding that is nominally about actual effects on wholesale rates. Indeed, at no point in this proceeding has the Commission explained why, if the "problem" at hand is the effect of state policies on wholesale rates, it is reasonable to target only certain state efforts and not others that may well have a greater wholesale market effect.[157] The failure to do so is arbitrary and capricious.

#### d. Addressing Only State Actions that Reduce Cost Is Arbitrary and Capricious

56. The December 2019 Rehearing Order grants clarification that the Regional Greenhouse Gas Initiative (RGGI) is not an actionable subsidy.[158] I am glad to hear it. Although I maintain that the distinction drawn in today's order is inconsistent with the most natural reading of the Commission's subsidy definition,[159] just about anything that

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[154] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106; December 2019 Order, 169 FERC ¶ 61,239 at P 68.

[155] *See supra* note 23.

[156] *See id*.

[157] Throughout the December 2019 Rehearing Order, the Commission responds to this point by quoting portions of the December 2019 Order that describe the Commission's action without responding to this argument. *See, e.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106 ("As we said in the December 2019 Order, the expanded MOPR is not intended to address all commercial externalities or opportunities that might affect the economics of a particular resource."). Although that quote accurately describes what the Commission said in its earlier order, it does not respond to the arguments that the line drawing described in that quote is arbitrary and capricious. That is a not a reasoned response; rehearing orders are an opportunity to further explain the Commission's analysis, not just regurgitate it.

[158] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 390.

[159] December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 23).

limits the extent of the Commission's interference with state resource decisionmaking is a step in the right direction.

57. But although that outcome may be a good one, it vividly illustrates the arbitrariness with which the Commission is going after state policies. The Commission's single-sentence clarification regarding RGGI is a little light on reasoning, but the upshot appears to be that RGGI does not cause problems for "market integrity,"[160] "investor confidence,"[161] "the first principles of capacity markets,"[162] or the "premise of a capacity markets"[163] because it addresses the externality of climate change by raising prices, rather than by lowering them. At no point, however, does the Commission explain why a state effort to tax the harm associated with a market failure is consistent with capacity markets, but a state effort to address the same harm by subsidizing resources that do not contribute to that externality is inconsistent with capacity markets. It may well be that a so-called "Pigouvian tax" is economically preferable to a "Pigouvian subsidy,"[164] but, even if true, that does explain why the former is consistent with the Commission's various capacity market buzzwords, but the latter is not.

58. In any case, the Commission's decision to find one approach inherently problematic and the other acceptable illustrates the extent to which it is meddling directly in state resource decisionmaking. Whatever you think about the economic merits of subsidies versus taxes as ways of addressing externalities, there should be no question that a state's choice between the two approaches is entirely the state's to make or that the Commission has no business in enacting regulations that give a preference to one approach over the other. In this example, the Commission's willingness to pick and choose which of the broadly equivalent state approaches to addressing climate change are allowed to affect the wholesale rate and which are not, is clear and unmistakable evidence of its meddling in decisions that the FPA expressly reserves to the states. The

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[160] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 301; June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 50; June 2018 Order, 163 FERC ¶ 61,236 at PP 1-2, 150, 156, 161.

[161] *ISO New England Inc.*, 162 FERC ¶ 61,205 at P 21; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 141.

[162] *ISO New England Inc.*, 162 FERC ¶ 61,205 at P 21.

[163] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 320; December 2019 Order, 169 FERC ¶ 61,239 at P 17.

[164] Sylwia Bialek & Burcin Unel, Institute for Policy Integrity, Capacity Markets and Externalities: Avoiding Unnecessary and Problematic Reforms at 6-7 (2018).

failure to recognize, much less explain, why it is appropriate to pick and choose which state policies are acceptable and which are not is arbitrary and capricious.

59. And that is particularly so given the structure and purpose of the capacity market, which exists to provide the "missing money.[165] Because the missing money is the *net* difference between a resource's revenue and its costs,[166] a resource should be indifferent, for the purposes of the capacity market, between a state policy that forces resources to internalize the cost of the externality or one that achieve the same thing by paying resources for not contributing to the externality. In other words, the Commission is relying on a distinction that is, for our purposes today, without a difference.

### 2. <u>Ignoring the Cost Impacts of the New MOPR Is Arbitrary and Capricious</u>

60. One of the most glaring omissions from the December 2019 order was its failure to make any effort to consider the costs of the new MOPR.[167] As the Commission acknowledges, "[s]etting a just and reasonable rate necessarily 'involves a balancing of the investor and consumer interests.'"[168] The Commission's various orders in this proceeding spend plenty of time asserting that investors need sweeping reforms in order to remain "confident" in the PJM capacity market. Unfortunately, the costs to consumers of making investors so confident went unmentioned in both the Commission's June 2018 and December 2019 orders.

61. Many parties raised the Commission's failure to consider consumer interests on rehearing.[169] In response, the Commission recites general propositions about the importance of customer interests only to undercut itself almost immediately thereafter. For example, the Commission begins one paragraph by stating that it "disagree[s] that the

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[165] *I.e.*, the capacity revenue a resource needs to be economic over and above what it earns in the energy and ancillary service markets. *N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (2020) (Glick, Comm'r, dissenting at P 4).

[166] Which is, after all, why the Commission's orders use net measures as the default offer floors for resources subject to the new MOPR. *See infra* PP 81-85.

[167] December 2019 Order, 169 FERC ¶ 61,239 at PP 54-57.

[168] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 139 (citing *NextEra*, 898 F.2d at 21).

[169] *Id.* at n.330 (non-exhaustive list of fifteen different rehearing requests raising this point).

Commission failed to consider the costs of the replacement rate."[170] But it then spends the rest of that paragraph explaining why it did not consider any estimate of the customer impacts before concluding that the resulting costs, whatever they may be, are necessarily just and reasonable because they "protect the integrity of the capacity market, which, in turn, ensures that investors will continue to be willing to develop resources to meet current and future reliability needs."[171] That sort of conclusory statement is hardly convincing evidence that the Commission actually took a hard look at the costs its orders will impose on customers.

62. The Commission dismisses as "speculative" any estimates of those costs. It would appear that a fair degree of work went into many of those estimates and I do not see the wisdom in dismissing them out-of-hand just because the details of the new MOPR have yet to be fully worked out.[172] After all, if the record provides enough evidence for the Commission to confidently assess that the costs of its new MOPR are worth it,[173] you

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[170] *Id.* P 139.

[171] *Id.*

[172] *Id*. In so doing, the Commission goes out of its way to criticize what I described as a "conservative," "back-of-the-envelope" calculation meant to help fill the void left by the Commission's failure to seriously consider the December 2019 Order's financial impact on customers. *Id.* n.352. In particular, it points to doubts raised by the Market Monitor about whether that calculation considered the right quantity of to-be-MOPR megawatts of capacity from nuclear generators. *Id.* I assumed it would be 6,000 MW. The Market Monitor suggested that number would be closer to 4,000 MW. *Id.* He may be right; it is hard to say how an unprecedented mitigation regime will work in practice.

In any case today's order makes clear that my cost estimate was, if anything, too conservative. For one thing, my estimate did not consider the cost of paying twice for capacity as a result of MOPR'ing the tens of the thousands of megawatts of renewable resources slated to be developed in the region to meet state renewable energy targets over the coming years. Clean Energy Associations estimated that that cost will be between $14 and $24 billion over the next decade. Clean Energy Associations Rehearing and Clarification Request at 22-23. My estimate also did not attempt to assess the effects of the bizarre conclusion, affirmed today, that the default service auctions in PJM retail choice states are somehow "subsidies," which will subject the resources that serve significant fractions of load in those states to the MOPR. *See supra* PP 49-51. Those are just two examples, but they illustrate why I remain confident that, when the dust settles, that back-of-the-envelope calculation will prove to have been a conservative one.

[173] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 139-140 (asserting

would think it would provide enough evidence to at least gauge the likely impact on consumers.

63. In addition, there is every reason to believe that the actual costs of today's orders will increase with time. Although these orders aim to hamper state efforts to shape the generation mix, they likely will not snuff them out entirely. In other words, there simply is no reason to believe that the Commission will succeed in realizing its "idealized vision of markets free from the influence of public policies."[174] As former Chairman Norman Bay aptly put it, "such a world does not exist, and it is impossible to mitigate our way to its creation."[175]

64. But that means that, as a resource adequacy construct, the PJM capacity market will increasingly operate in an alternate reality, ignoring more and more resources just because they receive some form of state support. That also means that customers will increasingly be forced to pay twice for capacity or, to put it differently, to buy more unneeded capacity with each passing year. I cannot fathom how the costs imposed by a resource adequacy regime that is premised on ignoring actual capacity can ever be just and reasonable.

65. The Commission responds to this point by asserting that the costs of double-procuring capacity are irrelevant because *NJBPU* held that states may "appropriately bear the costs" of their resource decisionmaking, including the costs associated with resources whose capacity does not clear in the capacity auction.[176] As noted above, there are good reasons to pause before applying *NJBPU* whole hog to this proceeding.[177] In any case, the Commission's citation to that decision's jurisdictional analysis does not insulate today's orders from the charge that it is arbitrary and capricious to altogether disregard the costs imposed by forcing the capacity market to ignore resources that actually exist or will developed and procuring additional resources as if those ignored resources did not

that while the "actual cost impacts of the replacement rate are speculative at this point," they will result in a rate increase the Commission deems just and reasonable).

[174] *N.Y. State Pub. Serv. Comm'n*, 158 FERC ¶ 61,137 (2017) (Bay, Chairman, concurring).

[175] *Id.*

[176] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 141.

[177] *See supra* PP 22-23.

exist.[178] Those are real costs that are directly traceable to the Commission's orders and cannot logically be ignored by an agency claiming to balance "consumer interests."[179]

66. The record before us provides every reason to believe that this approach will lead to other significant cost increases. For example, the new MOPR will exacerbate the potential for the exercise of seller-side market power in what the Market Monitor has described as a structurally uncompetitive market.[180] As the Institute for Policy Integrity explained, expanding the MOPR will decrease the competitiveness of the market, both by reducing the number of resources offering below the MOPR price floor and by changing the opportunity cost of withholding capacity.[181] With more suppliers subject to administratively determined price floors, resources that escape the MOPR—or resources with a relatively low offer floor—can more confidentially increase their bids up to that level, secure in the knowledge that they will still under-bid the mitigated offers. That problem is compounded by PJM's weak seller-side market power mitigation rules, which include a safe harbor for mitigation up to a market-seller offer cap that has generally been well above the market-clearing price.[182]

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[178] At various points, the Commission makes assertions, such as even the new MOPR forces customers to "pay twice" for capacity, "preserving the integrity of the capacity market will benefit customers over time by ensuring capacity is available when needed." December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 223. Conclusory assertions are the same thing as considering customers' interests.

[179] *Id.* P 139.

[180] *See* Market Monitor 2021/2022 BRA Analysis 2 ("The capacity market is unlikely ever to approach a competitive market structure in the absence of a substantial and unlikely structural change that results in much greater diversity of ownership. Market power is and will remain endemic to the structure of the PJM Capacity Market . . . . Reliance on the RPM design for competitive outcomes means reliance on the market power mitigation rules.")

[181] Institute for Policy Integrity Initial Brief at 14-16.

[182] For example, the RTO-wide market seller offer cap for the 2018 Base Residual Auction $237.56 per MW/day while the clearing price for the RTO-wide zone was $140.00 per MW/day. *See* PJM Interconnection, *2021/2022 RPM Base Residual Auction Results*, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx (last visited Dec. 19, 2019).

### 3. Disregarding the Effects of the New MOPR on Well-Established Business and Regulatory Models Is Arbitrary and Capricious

#### i. Demand Response

67. The PJM region has long benefitted from a robust participation of demand response resources. That is in part because PJM has had in place rules that accommodate short-lead-time resources. Specifically, the Commission has long recognized that demand response resources may not be identified years in advance of the delivery year.[183] Accordingly, PJM has permitted Curtailment Service Providers (CSP), *i.e.*, a demand response provider, to participate in the Base Residual Auction without identifying all end-use demand response resources at the time of the auction.[184] That has been fundamental to the demand response business model, since, without it, the short-lead time resources on which demand response depends might never be able to participate in the Base Residual Auction.[185]

68. So much for that. The December 2019 Rehearing Order states that the new MOPR "may require aggregators and CSPs to know all of their demand response resource end-users prior to the capacity auction."[186] In addition, it appears to require that,

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[183] For example, recognizing that demand response is a "short-lead-time" resource, the Commission previously directed PJM to revise the allocation of the short-term resource procurement target so that short-lead-time resources have a reasonable opportunity to be procured in the final incremental auction. *PJM Interconnection L.L.C.*, 126 FERC ¶ 61,275 (2009). The Commission subsequently removed the short-term resource procurement target only after concluding that doing so would not "unduly impede the ability of Demand Resources to participate in PJM's capacity market." *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at PP 394, 397 (2015).

[184] Under PJM's current market rules, CSPs must submit a Demand Resource Sell Offer Plan (DR Sell Offer Plan) to PJM no later than 15 business days prior to the relevant RPM Auction. This DR Sell Offer Plan provides information that supports the CSP's intended DR Sell Offers and demonstrates that the DR being offered is reasonably expected to be physically delivered through Demand Resource Registrations for the relevant delivery year. *See* PJM Manual 18: PJM Capacity Market – Attachment C: Demand Resource Sell Offer Plan.

[185] As CPower and LSPower explain, such customers typically make participation decisions in a shorter time frame than the three-year forward auction designed to reflect the time needed to develop a new generation facility. CPower/LSPower Rehearing Request at 11.

[186] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 266.

for each resource with behind-the-meter generation, the CSP must identify the relative share of its capacity that results from demand reduction versus behind-the-meter generation.[187] And the CSP will have to know all of that three years before the delivery year. That is a stunning level of paperwork to impose on CSPs, which may well require many, if not most, of them to fundamentally change or altogether abandon their business model. I fail to see anything in this record that suggests that the Commission's concerns about state policies justifies that result.

69. While the grandfathered treatment provided to existing demand response resources could help blunt the impact of the new MOPR, the confusing language in the Commission's order raises more questions than it answers, leaving CSPs, PJM, and the Market Monitor with little guidance on how to mitigate demand response resources. Rather than explaining that the grandfathered treatment attaches to the resource itself, which would seem the only logical conclusion, the Commission adds that "Aggregators and CSPs will be considered to have previously cleared a capacity auction only if *all the individual resources within the offer* have cleared a capacity auction."[188] Why an entire a CSP's portfolio must receive all-or-nothing treatment is unclear, unexplained and raises fundamental questions about how this will work when resources switch CSPs, as they often do.[189]

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[187] In response to requests to clarify offer floors for demand response resources backed by a combination of behind-the-meter generation and reduced consumption, the Commission simply reiterates that the December 2019 Order found that different default offer price floors should apply to demand response backed by behind-the-meter generation and demand response backed by reduced consumption (*i.e.*, curtailment-based demand response programs). December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 187-188.

[188] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at 265 (emphasis added).

[189] In addition, the December 2019 Rehearing Order concludes that if a demand response resource earns any revenue through a state-sponsored *retail* demand response program, it is impermissibly subsidized and subject to the new MOPR. *Id.* P 264. But just a few months ago, the Commission approved rules in NYISO that treat a state retail demand response program as a subsidy for the purposes of the capacity *only* if the purpose of that state program is to procure demand response for its capacity value. *N.Y. Pub. Serv. Comm'n v. N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,120 (2020) ("[W]e will evaluate retail-level demand response programs on a program-specific basis to determine whether payments from those programs should be excluded from the calculation of SCRs' offer floors."). Those are radically different approaches to the permissible effects of state retail demand response programs, which cannot be papered

70. The bottom line here is that the Commission's attempt to root out certain state "subsidies" manifests itself as an out-and-out attack on the demand response business model in PJM.[190] That attack is particularly unfortunate as PJM indicated that the default offer floor for at least certain demand response resources should be at or near zero,[191] suggesting that even if demand response resources receive a subsidy, that subsidy would not reduce their offer below what this Commission calls a "competitive offer." Demand response has provided tremendous benefits to PJM, both terms of improved market efficiency and increased reliability. I see no reason to give up those benefits based on an unsubstantiated concern about state policies.

**ii. <u>Public Power</u>**

71. Today's order also continues the Commission's attack on public power, dismissing the entire business model as a state subsidy and jeopardizing the viability of a construct that has long benefited customers. As ill-advised as that attack is, it is equally unsupported. The Commission neither marshals evidence that the existence of public power has actually suppressed prices[192] nor addresses arguments that the type of balanced portfolio typically developed by public power entities will not have that effect.[193] The

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over simply by observing that one set of rules apply in PJM and another in NYISO.

[190] Indeed, buried in footnotes in the December 2019 Rehearing Order, the Commission appears to insinuate that demand response resources, among other resources, should perhaps be kicked out of the capacity market entirely. *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at n.598. ("We pause to note that, as the capacity market has developed, an ever-growing number of resource types have come to participate in the market that were not contemplated. This proceeding . . . does not necessarily resolve issues regarding whether, to what extent, and under what terms resources that are not able to produce energy on demand should participate in the capacity market consistent with the Commission's mandate to ensure the reliability of the electric system"); *id.* n.451 ("The Commission is concerned that there may be a point where energy efficiency is unable to supply capacity when needed to maintain system reliability. However, that issue can be pursued in a separate proceeding.").

[191] PJM explains that, beyond the initial costs associated with developing a customer contract and installing any required hardware or software, it could not identify any avoidable costs that would be incurred by an existing Demand Resource that would result in a MOPR Floor Offer Price of greater than zero. PJM Initial Brief at 47.

[192] The Commission offers no data, such as sell-offer data of utilities or public power entities or provides any evidence in support of this finding. *See* SMECO Rehearing Request at 6; Allegheny Rehearing Request at 12.

[193] After all, public power entities typically procure roughly the amount of supply

Commission's unsupported treatment of public power is, as PJM points out in its rehearing request, "overbroad and unwarranted."[194]

72. Today's order leaves public power with few options. Unlike most public utilities,[195] PJM's existing FRR option is not much good for many public power entities since "participating in the FRR option is an all-or-nothing proposition, and appeals as a practical matter only to large utilities that still follow the traditional, vertically integrated model."[196] In addition, the Commission concludes that third-party contracts signed by public power entities are also state subsidies.[197] That effectively forces public power to procure capacity based only on the narrow considerations evaluated in the PJM capacity market—a result inimical to the purpose of the public power model.

73. The public power model predates the capacity market by several decades and is premised on securing a reliable supply of power for each utility's citizen-owners at a

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needed to meet their demand. In response to arguments raising this point and contending that an approach based on net long, net short thresholds (which would formally require a rough equivalence between supply and demand to avoid mitigation) would be just and reasonable and more consistent with Commission precedent, *see* Public Power Entities Request for Rehearing and Clarification at 30-32; PJM Request for Rehearing and Clarification at 13-14; ODEC Request for Rehearing and Clarification at 7-9, today's order asserts that "the expanded MOPR is premised on a resource's ability to suppress price due to the benefit it receives from out-of-market support, not based on the likelihood and ability to exercise of buyer-side market power." December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 228. But the ability to "exercise" buyer-side market power is the ability to reduce prices. If public power entities' load equals their supply, their choice of how to serve that load will not cause price suppression plain and simple. The Commission has previously found such thresholds can protect against price suppression. *See N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121, at P 90 (2020) (discussing buyer-side market power concerns associated with self-supply). It fails to provide a reasoned basis for rejecting the same approach today.

[194] PJM Rehearing and Clarification Request at 13.

[195] These terms get confusing quickly. Under the FPA, a "public utility" will typically be privately owned while an entity that is not a "public utility" will often be publically owned. *See* 16 U.S.C. §§ 824(e) & (f). Accordingly, "public power" is generally made up of non-public utilities.

[196] *NJBPU*, 744 F.3d at 84 (footnote omitted).

[197] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 243, 325.

reasonable and stable cost, which often includes an element of long-term supply.[198] The policy affirmed in today's order is a direct threat to the long-term viability of the public power model in PJM. Although the Commission exempts existing public power resources from the MOPR, it provides that all new public power development will be subject to mitigation. That means that public power's selection and development of new capacity resources will now be dependent on the capacity market outcomes, not the self-supply model on which it has traditionally relied. That fundamentally upends the public power model because it limits the ability of public power entities to choose how to develop and procure resources over a long time horizon.

**iii. <u>Energy Efficiency</u>**

74. The Commission is also arbitrary and capricious in its treatment of energy efficiency resources—*e.g.*, efficient light bulbs, air conditioning units, and water heaters whose installation reduces electricity use. Although energy efficiency resources reduce demand for electricity, they participate in the PJM capacity auction as "supply" for four years so that they can receive compensation for reducing the total amount of capacity needed in the region.[199] To make that work in practice, PJM "adds back" to the demand curve the capacity equivalent of any energy efficiency resources that participate in the auction.[200] Doing so ensures that the capacity provided by energy efficiency resources is not double counted.

75. Today's order concludes that any energy efficiency resources that participate in the PJM capacity auction and receive a state subsidy suppress prices and, therefore, must be subjected to the new MOPR.[201] The record does not support that determination. As

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[198] American Municipal Power and Public Power Association of New Jersey Initial Brief at 14-15; American Public Power Association Initial Brief at 15.

[199] PJM Manual 18B, Energy Efficiency Measurement & Verification 10-13, *available at* pjm.com/~/media/documents/manuals/ m18b.ashx. After those four years, energy efficiency resources no longer participate in the capacity auction and instead are recognized only as reductions in demand. *Id.*

[200] *Id. Participate*, not clear. That means that if an energy efficiency resource bids into, but does not clear the capacity market, its capacity is *still* added back to the demand curve. This is because as PJM explains, the auction parameters are adjusted by adding the MWs in approved energy efficiency plans that are proposed for that auction back into the reliability requirements. PJM Rehearing and Clarification Request at 15, n.41. For approved plans, that add back occurs whether or not resources will know if they cleared the auction.

[201] December 2019 Order, 169 FERC ¶ 61,239 at P 255.

PJM's Market Monitor explained, including energy efficiency in the PJM capacity auction—by treating it as supply and then adding it back to the demand curve—actually *increases* the prices in that auction by roughly 10 percent, all else equal.[202] In other words, the record does not indicate that the energy efficiency resources participating in the capacity market (subsidized or otherwise) are having any price suppressive effect whatsoever. Instead, the record indicates that the only time energy efficiency resources can decrease capacity market prices is when, after four years, those resources no longer participate in the capacity market and are no longer subject to the new MOPR.[203]

76. Today's order completely fails to address these points even though PJM itself, not to mention several other parties, argued on rehearing that the Commission's approach to energy efficiency was inconsistent with its own theory of the case and would make a hash of the markets.[204] Instead, the Commission asserts that energy efficiency resources can cause price suppression because, according to the Commission, that is the inevitable result of subsidizing any resource.[205] To support that proposition, the Commission relies on a single piece of irrelevant arithmetic. It multiples the total MWs of energy efficiency that cleared in the capacity market in a given year by the clearing price that year and asserts that the resulting figure shows that energy efficiency "has affected revenues in the PJM capacity market."[206] That may be true, but it does not shed any light whatsoever on whether energy efficiency, subsidized or not, suppresses the capacity market clearing price. Indeed, the Commission fails to wrestle with the fact that, as a result of the add-

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[202] The Independent Market Monitor for PJM, *Analysis of the 2021/2022 RPM Base Residual Auction* 20 (2018), *available at* http://www.monitoringanalytics.com/reports/Reports/2018/IMM_Analysis_of_the_20212022_RPM_BRA_Revised_20180824.pdf (2018 PJM State of the Market Report).

[203] At that point, the energy savings from energy efficiency resources are "baked into" PJM's demand forecast and, thus, the resources are no longer eligible for a capacity payment for reducing demand relative to that projection.

[204] *E.g.*, PJM Rehearing and Clarification Request at 15 & n.41; Advanced Energy Entities at 12-15; CPower/LSPower Rehearing and Clarification Request at 6-8.

[205] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 257 ("We reject the contention that energy efficiency's market participation cannot suppress prices. State Subsidies, if effective, will by their very nature increase the quantity of whatever is subsidized. State subsidies to energy efficiency should result in additional energy efficiency resource participation.").

[206] *Id.* P 256.

back provision, energy efficiency resources will not suppress the capacity clearing price. Calculating their total revenue does not change that fact.

77. In addition, the Commission blithely asserts that energy efficiency must be subject to the new MOPR because "[d]ecreased demand resulting from a State Subsidy will suppress prices just as a State Subsidy to supply will suppress prices."[207] That general statement proves too little. It simply cannot be the case that any action a state takes to conserve electricity is a "problem" for the Commission to fix. Instead, the state action can implicate the Commission's interests through resources' participation in the capacity market, if at all. As explained above, however, the record is clear that energy efficiency resources' participation in the capacity market does not have a price suppressive effect; quite the opposite, in fact. The Commission's failure to wrestle with the actual effects of energy efficiency participating as a capacity resource renders its justification for applying the MOPR to such resources arbitrary and capricious.

**iv. <u>Voluntary RECs</u>**

78. Today's order grants clarification that "purely voluntary transactions for RECs are not considered State Subsidies." Again, I am glad to hear it. As I explained in my earlier dissent, transactions involving voluntary REC sales would not meet any reasonable definition of subsidy and would instead amount to "mitigating the impact of *consumer preferences* on wholesale electricity markets just because they may potentially overlap with state policies."[208] In addition, I noted that there were eminently reasonable ways to address the Commission's practical concerns about ensuring that voluntary RECs are not eventually used to comply with state mandates. I am glad to see that that view seems to have prevailed.

79. Nevertheless, today's order makes clear that voluntary RECs are not out of the woods yet. In a pair of ominous (and redundant) footnotes, the Commission's goes out of its way to assert that all today's order concludes is that voluntary RECs are not state subsidies and that, pardon the double negative, that conclusion is not a finding that voluntary RECs do not distort capacity market outcomes.[209] If the question is whether consumers' voluntary decision to purchase clean energy could "distort" efficient market

[207] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 257.

[208] December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 41) (footnotes and internal quotation marks omitted).

[209] *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at n.808 ("The treatment of voluntary RECs in this order is not a determination regarding whether the revenue from voluntary REC transactions results or could result in capacity market distortions."); *id.* n.807 (exact same point).

outcomes, the answer is a straightforward no. The fact that the Commission feels the need to go out of its way to preserve that question for a future proceeding is as ominous as it is unnecessary. It is both notable and concerning that the Commission did not feel the need to preserve the same question when addressing other voluntary out-of-market for capacity resources, such as sales of coal ash, which it describes as "similarly situated" to voluntary REC sales.[210]

### 4. Applying Different Offer Floors to New and Existing Resources Is Arbitrary and Capricious

80. As I explained in my dissent from the December 2019 Order, the Commission's imposition of disparate offer floors for new and existing resources is unjust and unreasonable, unduly discriminatory as well as arbitrary and capricious. Today's order affirms the decision to require new resources receiving a State Subsidy to be mitigated to Net Cost of New Entry (Net CONE) while existing resources receiving a State Subsidy are mitigated to their Net Avoidable Cost Rate (Net ACR). The Commission suggested that this distinction is appropriate because new and existing resources do not face the same costs.[211] In particular, the Commission suggested that setting the offer floor for new resources at Net ACR would be inappropriate because that figure "does not account for the cost of constructing a new resource."[212] Today's order uses more words to make the same points.[213]

81. Regardless, the Commission's distinction does not hold water. As the Market Monitor explained in his comments, it is illogical to distinguish between new and existing resources when defining what is (or is not) a competitive offer.[214] That is because, as a

[210] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 326 (finding "to the extent coal ash sales are purely voluntary, such that they do not fall under the definition of State Subsidy, they are similarly situated to voluntary RECs, which are not mitigated under the replacement rate.").

[211] December 2019 Order, 169 FERC ¶ 61,239 at P 140.

[212] *Id*.

[213] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 157-159.

[214] Independent Market Monitor Brief at 16 ("A competitive offer is a competitive offer, regardless of whether the resource is new or existing."); *id*. at 15-16 ("It is not an acceptable or reasonable market design to have two different definitions of a competitive offer in the same market. It is critical that the definitions be the same, regardless of the reason for application, in order to keep price signals accurate and incentives consistent.").

result of how most resources are financed, a resource's costs will not materially differ based on whether it is new or existing (*i.e.*, one that has cleared a capacity auction). That means that there is no basis to apply a different formula for establishing a competitive offer floor based solely on whether a resource has cleared a capacity auction. To the extent it is appropriate to consider the cost of construction for a new resource it is just as appropriate to consider the cost of construction for one that has already cleared a capacity auction. That is consistent with Net CONE, which calculates the nominal 20-year levelized cost of a resource minus its expected revenue from energy and ancillary services. Because that number is *levelized*, it does not change between a resource's first year of operation and its second.

82. In addition, as the Market Monitor explains, Net CONE does not reflect how resources actually participate in the market.[215] Instead of bidding their levelized cost, both new and existing competitive resources bid their marginal capacity—*i.e.*, their net out-of-pocket costs, which Net ACR is supposed to reflect. Perhaps reasonable minds can differ on the question of which offer floor formula is the best choice to apply. But there is nothing in this record suggesting that it is appropriate to use different formulae based on whether the resource has already cleared a capacity auction.

83. It may be true that setting the offer floor at Net ACR for new resources will make it more likely that a subsidized resource will clear the capacity market, MOPR notwithstanding. Holding all else equal, the higher the offer floor, the less likely that a subsidized resources will clear, so a higher offer floor will more effectively block state policies. But that does not justify applying Net ACR to existing resources and Net CONE to new ones.

84. The purpose of a capacity market, the whole reason the market exists, is to ensure resource adequacy at just and reasonable rates.[216] It is a means, not an end. And for that purpose, a megawatt of capacity provided by a new resource is every bit as effective as a megawatt provided by an existing one. Applying entirely different bid floor formulae based only on whether the resource is new or existing does not further that basic purpose. Instead, as the Commission all but admits,[217] the purpose those disparate bid floors serve

[215] *Id.*

[216] *Cf.* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at 230 ("The objective of the capacity market is to select the least cost resources to meet resource adequacy goals.").

[217] *Id.* P 158 ("Using Net ACR as the MOPR value for new resources would not serve the purpose of the MOPR, because it does not reflect new resources' actual costs of entering the market and therefore would not prevent uneconomic State-Subsidized Resources from entering the market."); December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 159 ("Using Net CONE as the default offer price floor for new resources

is to make it easier to block the entry of state-subsidized resources. A capacity market designed first and foremost for the purpose of blocking state policies is one in which the tail truly wags the dog.[218]

## III. Today's Orders Are Not about Promoting Competition

85. By this point, the irony of today's orders should be clear. The Commission spends hundreds of pages decrying government efforts to shape the generation mix because they interfere with "competitive" forces.[219] In order to stamp out those efforts and promote its vision of "competition," the Commission creates a byzantine administrative pricing scheme that bears all the hallmarks of cost-of-service regulation, without any of the benefits. That is a truly bizarre way of fostering the market-based competition that these orders claim to so highly value.

86. It starts with the Commission's definition of subsidy, which encompasses vast swathes of the PJM capacity market, including new investments by vertically integrated utilities and public power, merchant resources that receive any one of the litany of subsidies available to particular resources or generation types, and any resource that benefits even indirectly from one of the many state default service auctions in PJM.[220] Moreover, the Commission's inaptly named Unit-Specific *Exemption*[221]—its principal response to concerns about over mitigation—is simply another form of administrative

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will ensure that the expanded MOPR achieves its goal and prevents uneconomic new entry from clearing the capacity market as a result of State Subsidies").

[218] To appreciate this, one need only look at the Commission's apparent willingness to set certain resources offer floor—*i.e.*, their Net CONE—above the demand curve's intercept. That means that the Commission is willing to set price floors that ensure that ensure that those resource *can never* clear the capacity market, no matter how serious the reliability need and even if that resource is the only that can meet it. *See* Illinois Commission Rehearing Request at 18. In a choice between ensuring reliability and blocking state policies, the Commission will choose the latter.

[219] June 2018 Order, 163 FERC ¶ 61,236 at P 1.

[220] *See Supra* Section II.B.1.b.

[221] In the December 2019 Order, the Commission renamed what is currently the "Unit Specific *Exception*" in PJM's tariff to be a Unit Specific *Exemption*. But, regardless of name, it does not free resources from mitigation because they are still subject to an administrative floor, just a lower one. An administrative offer floor, even if based on the resource's actual costs does not protect against over-mitigation and certainly is not market competition.

pricing.[222] All the Unit-Specific Exemption provides is an escape from the relevant default offer floor. Resources are still required to bid above an administratively determined price floor, not at the level that they believe would best would best serve their competitive interests.[223] Nor is it clear that this so-called exemption will even be resource-specific.[224] And even resources that might appear eligible for the Competitive Entry Exemption may hesitant to take that option given the Commission's proposal to permanently ban from the capacity market any resource that invokes that exception and later finds itself subsidized.[225] Are those resources really going to wager their ability to participate in the capacity market on the proposition that their state will never institute a non-bypassable policy that the Commission might deem an illicit financial benefit?

87. To implement this scheme, PJM and the Market Monitor will need to become the new subsidy police, regularly reviewing the laws and regulations of 13 different states and the District of Columbia—not to mention hundreds of localities and municipalities—in search of any provision or program that could conceivably fall within the Commission's definition of State Subsidy. "But that way lies madness."[226] It will also require PJM and the Market Monitor to identify any and all contracts power marketers

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[222] It bears repeating that the Commission has expressly abandoned market-power—the justification for cost-of-service regulation—as the basis for its new MOPR. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 45 ("[T]he expanded MOPR does not focus on buyer-side market power mitigation.").

[223] *See* Public Power Entities Rehearing Request at 4 ("Ironically, by its latest action, the Commission has removed any remaining genuine market component . . .by requiring all 'competitive' offers to be determined administratively in Valley Forge, Pennsylvania.").

[224] The Commission is requiring that all new resources, regardless of type, must use a standard asset life. That flouts the entire premise of a Unit-Specific Exemption, which, the Commission reminds us throughout today's order, is supposed to reflect the *specific* unit's costs and expected market revenues. It is particularly, "arbitrary and illogical" to mandate that resources assume a 20-year asset life when most renewable units typical have a useful commercial life of 35 years. *See* Clean Energy Advocates Rehearing Request at 83. The Commission dismisses such concerns by stating that standardized inputs are a simplifying tool December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 290.

[225] December 2019 Order, 169 FERC ¶ 61,239 at P 162.

[226] David Roberts, *Trump's crude bailout of dirty power plants failed, but a subtler bailout is underway* (Mar. 23, 2018), https://www.vox.com/energy-and-environment/2018/3/23/17146028/ferc-coal-natural-gas-bailout-mopr.

have with resources that may be used to serve commitments incurred in a state default service auction. Rooting through retail auctions results and hundreds of different sets of laws and regulations looking for anything that might be "nearly tethered" to wholesale rates is hardly a productive use of anyone's time.

88. And identifying the potential subsidies is just the start. Given the consequences of being subsidized, today's orders will likely unleash a torrent of litigation over what constitutes a subsidy and which resources are or are not subsidized. Next, PJM will have to develop default offer floors for all relevant resource types, including many that have never been subject to mitigation in PJM or anywhere else—*e.g.*, demand response resources, energy efficiency resources, or resources whose primary function is not generating electricity. Moreover, given the emphasis that the Commission puts on the Unit-Specific Exemption as the solution to concerns about over-mitigation, we can expect that resources will attempt to show that their costs fall below the default offer floor, with many resorting to litigation should they fail to do so. The result of all this may be full employment for energy lawyers, but it is hardly the most obvious way to harness the forces of competition.

89. Finally, although this administrative pricing regime is likely to be as complex and cumbersome as cost-of-service regulation, it provides none of the benefits that a cost-of-service regime can provide. Most notably, the administrative pricing regime is a one-way ratchet that will only increase the capacity market clearing price. Unlike cost-of-service regulation, there is no mechanism for ensuring that bids reflect true costs. Nor does this pricing regime provide any of the market-power protections provided by the cost-of-service model. Once mitigated, resources are required to offer no *lower* than their administratively determined offer floor, but there is no similar prohibition on offering above that floor.[227]

## IV. <u>Today's Orders Are Instead All about Slowing the Clean Energy Transition</u>

90. If they do not promote competition, today's orders certainly serve an alternative, overarching purpose: Slowing the region's transition to a clean energy future. Customers throughout PJM, not to mention several of the PJM states, are increasingly demanding that their electricity come from clean resources. Today's orders represent a major obstacle to those goals. Although even this Commission won't come out and say that, the cumulative effect of the various determinations in today's orders is unmistakable. It helps to rehash in one place what the mitigation regime affirmed in the December 201 Rehearing Order will do.

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[227] Moreover, as discussed above, *see supra* P 67, PJM's capacity market is structurally uncompetitive and lacks any meaningful market mitigation. There is every reason to believe that today's orders will exacerbate the potential for the exercise of market power.

91. First, after establishing a broad definition of subsidy, the Commission creates several categorical exemptions that overwhelmingly benefit existing resources. Indeed, the exemptions for (1) renewable resources, (2) self-supply, and (3) demand response, energy efficiency, and capacity storage resources are all limited to existing resources.[228] That means that all those resources will never be subjected to the MOPR and can continue to bid into the market at whatever level they choose, while every comparable new resource must run the administrative pricing gauntlet. In addition, new natural gas resources remain subject to the MOPR.[229] All told, those exemptions provide a major benefit to existing resources.

92. Second, as noted above, the Commission creates different offer floors for existing and new resources.[230] Using Net CONE for new resources and Net ACR for existing resources will systematically make it more likely that existing resources of all types can remain in the market, even if they have higher costs than new resources that might otherwise replace them. As the Market Monitor put it, this disparate treatment of new and existing resources "constitute[s] a noncompetitive barrier to entry and . . . create[s] a noncompetitive bias in favor of existing resources and against new resources of all types, including new renewables and new gas fired combined cycles."[231]

93. Third, the mitigation scheme imposed by today's orders will likely cause a large and systematic increase in the cost of capacity. Although that will appear as a rate increase for consumers, it will be a windfall to existing resources that clear the capacity market. That windfall will make it more likely that any particular resource will stay in the market, even if there is another resource that could supply the same capacity at less cost to consumers.

94. Finally, the December 2019 Order again dismisses the June 2018 Order's fig leaf to state authority: The resources-specific FRR Alternative.[232] That potential path for accommodation was what allowed the Commission to profess that it was not attempting to "“disregard” or “nullify” state public policies. Although implementing that option would no doubt have been a daunting task, doing so at least had the potential to establish

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[228] December 2019 Order, 169 FERC ¶ 61,239 at PP 173, 202, 208.

[229] *Id.* PP 2, 42.

[230] *See supra* Section II.B.4.

[231] Internal Market Monitor Reply Brief at 4.

[232] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 348; June 2018 Order, 163 FERC ¶ 61,236 at P 157.

a sustainable market design by allowing state policies to have their intended effect on the resource mix. And that is why it is no longer on the table. It could have provided a path for states to continue shaping the energy transition—exactly what this new construct is designed to stop.

95. The Commission proposes various justifications for each of these changes, some of which are more satisfying than others. But don't lose the forest for the trees. At every meaningful decision point in today's orders, the Commission has elected the path that will make it more difficult for states to shape the future resource mix. Nor should that be any great surprise. Throughout this proceeding, the Commission has focused narrowly on states' exercise of their authority over generation facilities, treating state authority as a problem that must be remedied by a heavy federal hand. The only thing that was new in the December 2019 order was the extent to which the Commission was willing to go. Whereas the June 2018 Order at least paid lip service to the importance of accommodating state policies,[233] the December 2019 Order—and today's orders—are devoid of any comparable sentiment.

96. In addition, in a now-familiar pattern, today's orders put almost no flesh on the bones of the Commission's edicts and provide precious little guidance how the new MOPR will work in practice. Most of the actual work will come in the compliance proceedings, not to mention the coming litany of section 205 filings, section 206 complaints, and petitions for declaratory orders seeking guidance on fact patterns that the Commission, by its own admission, has not yet bothered to contemplate. In each of those proceedings, the smart money should be on the Commission adopting what it will claim to be facially neutral positions that, collectively, entrench the current resource mix. Although the proceedings to come will inevitably garner less attention than today's orders, they will be the path by which the "quiet undoing" of state policies progresses.[234]

97. The December 2019 Rehearing Order is a concerning preview of that process. In the two thousand-plus pages of rehearing requests filed in response to December 2019 Order, parties raised a wide range of concerns. Today's orders duck almost every single one, falling back on generalizations and a single-minded focus on extirpating the effects of state policies. Although the order is long in pages, it is short on any serious effort to grapple with or explain the implications of the Commission's actions. Moreover, in the few instances in which the Commission gave ground, such as voluntary RECs, it did so

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[233] June 2018 Order, 163 FERC ¶ 61,236 at P 161.

[234] Danny Cullenward & Shelley Welton, *The Quiet Undoing: How Regional Electricity Market Reforms Threaten State Clean Energy Goals*, 36 Yale J. on Reg. Bull. 106, 108 (2019), *available at* https://www.yalejreg.com/bulletin/the-quiet-undoing-how-regional-electricity-market-reforms-threaten-state-clean-energy-goals/.

only with an ominous warning that is likely to cause more confusion than it clears up.[235] Everything about today's orders should concern those with a stake in a durable resource adequacy construct in PJM.

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98. At this point, the die has been cast. Today's orders make unambiguously clear that the Commission intends to array PJM's capacity market rules against the interests of consumers and of states seeking to exercise their authority over generation facilities. For all the reasons discussed above, these orders are illegal, illogical, and truly bad public policy.

99. But, even beyond that, today's orders are deeply disappointing because they will fracture PJM, the largest RTO in the country. As I predicted in my dissent from the December 2019 Order, states throughout the region are already looking for ways to pull their utilities out of the capacity market rather than remain under rules designed to damage their interests. Today's orders snuff out what little hope may have remained that the Commission would again change course and adopt a more sensible market design. As a result, states committed to exercising their rights under FPA section 201(b) will have little choice but to exit the capacity market. I strongly urge PJM to work with the states and provide them the time needed to make the transition as smooth as possible.

100. Fostering large regional markets for energy, ancillary services, and capacity, has been one of the Commission's principal successes over the last quarter century. I hate to see that success undone based on an obsession with blocking the effects of state public policies. But, unfortunately, the Commission chose the path that it did. In so doing, we have abdicated the leadership role that we ought to have taken in developing a resource adequacy paradigm that accommodates the fundamental changes currently under way in the electricity sector.

101. The irony in all this is that the Commission asserts that it is acting to "save" the capacity market even as it sets the market on a course toward its eventual demise.

For these reasons, I respectfully dissent.

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Richard Glick
Commissioner

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[235] *See supra* p 79; *see also supra* note 190.

171 FERC ¶ 61,035
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick, Bernard L. McNamee,
and James P. Danly.

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| Calpine Corp.; Dynegy Inc.; Eastern Generation, LLC; Homer City Generation, L.P.; NRG Power Marketing LLC; GenOn Energy Management, LLC; Carroll County Energy LLC; C.P. Crane LLC; Essential Power, LLC; Essential Power OPP, LLC; Essential Power Rock Springs, LLC; Lakewood Cogeneration, L.P.; GDF SUEZ Energy Marketing NA, Inc.; Oregon Clean Energy, LLC; and Panda Power Generation Infrastructure Fund, LLC v. PJM Interconnection, L.L.C. | Docket Nos. EL16-49-002 |
| PJM Interconnection, L.L.C. | EL18-178-002 (Consolidated) |

ORDER ON REHEARING AND CLARIFICATION

(Issued April 16, 2020)

Paragraph Numbers

1. This order addresses requests for rehearing and clarification of the order issued in the above-captioned proceeding on December 19, 2019, which established a replacement rate addressing state support for entry, or continued operation, of preferred generation resources in the capacity market administered by PJM Interconnection, L.L.C. (PJM).[1] For the reasons discussed below, we grant, in part, and deny, in part, requests for rehearing and clarification, and direct PJM to submit a further compliance filing within 45 days of issuance of this order, as discussed in the body of this order.

## I. Background

2. Acting on both a complaint filed by Calpine Corporation and additional generation entities[2] and a filing by PJM to amend its Tariff, the Commission issued an order on June 29, 2018, finding that PJM's Tariff was unjust and unreasonable because it failed to protect the integrity of competition in PJM's wholesale capacity market against unreasonable price distortions and cost shifts caused by out-of-market support to keep existing uneconomic resources in operation, or to support the uneconomic entry of new resources.[3] In the June 2018 Order, the Commission also *sua sponte* initiated a proceeding under section 206 of the Federal Power Act (FPA)[4] and established a paper hearing to determine a just and reasonable replacement rate. Upon review of the testimony filed in the paper hearing, the Commission issued the December 2019 Order directing PJM to implement a replacement rate, consistent with the Commission's guidance in that order. Specifically, the December 2019 Order directed PJM to retain its current mitigation of new natural gas-fired resources under the existing MOPR, while extending the MOPR to include both new and existing resources, internal and external,

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[1] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,239 (2019) (December 2019 Order).

[2] Calpine Corp. was joined by Dynegy Inc.; Eastern Generation, LLC; Homer City Generation, L.P.; NRG Power Marketing LLC; GenOn Energy Management, LLC; Carroll County Energy LLC; C.P. Crane LLC; Essential Power, LLC; Essential Power OPP, LLC; Essential Power Rock Springs, LLC; Lakewood Cogeneration, L.P.; GDF SUEZ Energy Marketing NA, Inc.; Oregon Clean Energy, LLC; and Panda Power Generation Infrastructure Fund, LLC.

[3] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236, at P 150 (2018) (June 2018 Order).

[4] 16 U.S.C. § 824e (2018).

that receive, or are entitled to receive, State Subsidies,[5] subject to certain exemptions.[6] These exemptions include the Self-Supply Exemption, the Demand Response, Energy Efficiency, and Capacity Storage Resources Exemption, the Renewable Portfolio Standards Exemption, the Unit-Specific Exemption, and the Competitive Exemption.

## II. Rehearing and Clarification Requests

3. Requests for rehearing and clarification of the December 2019 Order were submitted by the entities identified in the appendix to this order. The substance of these requests is summarized below.[7]

## III. Procedural Matters

4. Motions to intervene out-of-time were submitted on January 17, 2020, by the Office of the Attorney General of Maryland and the Maryland Energy Association, and on January 21, 2020, by The Hershey Company, Longroad Development Company, LLC, and the Energy Storage Association (together, Late Intervenors). In ruling on a motion to intervene out-of-time, we apply the criteria set forth in Rule 214(d) of the Commission's Rules of Practice and Procedure,[8] and consider, *inter alia*, whether the movant had good

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[5] The December 2019 Order defined State Subsidy as "[a] direct or indirect payment, concession, rebate, subsidy, non-bypassable consumer charge, or other financial benefit that is (1) a result of any action, mandated process, or sponsored process of a state government, a political subdivision or agency of a state, or an electric cooperative formed pursuant to state law, and that (2) is derived from or connected to the procurement of (a) electricity or electric generation capacity sold at wholesale in interstate commerce, or (b) an attribute of the generation process for electricity or electric generation capacity sold at wholesale in interstate commerce, or (3) will support the construction, development, or operation of a new or existing capacity resource, or (4) could have the effect of allowing a resource to clear in any PJM capacity auction." December 2019 Order, 169 FERC ¶ 61,239 at P 67.

[6] *Id.* P 2.

[7] On April 16, 2020, Commissioner Bernard L. McNamee issued a memorandum to the file documenting his decision not to recuse himself from these dockets, based on memoranda dated April 13, 2020, December 13, 2019, October 11, 2019, January 28, 2019, and January 2, 2019, (and attachments thereto, including email communications dated June 17 and September 17, 2019) from the Designated Agency Ethics Official and Associate General Counsel for General and Administrative Law in the Office of General Counsel.

[8] 18 C.F.R. § 385.214 (2019). Enerwise Global Technologies, Inc., d/b/a CPower (CPower) also filed a motion of intervene out-of-time. Because CPower timely filed a

cause for failing to file the motion within the time prescribed. Parties seeking to intervene after issuance of a Commission determination in a case bear a heavy burden. Where, as here, late intervention is sought after the issuance of a dispositive order, the prejudice to other parties and burden upon the Commission of granting the late intervention may be substantial. Thus, movants bear a higher burden to demonstrate good cause for granting such late intervention. Late Intervenors have failed to demonstrate the requisite good cause. Generally, Late Intervenors do not claim they did not have notice of the proceeding. Rather, they claim they were not aware of how the December 2019 Order would impact them or that they would like to advocate for themselves. We do not find these reasons to be sufficient to meet the higher burden to show good cause for granting intervention following a dispositive order. Accordingly, we deny Late Intervenors' motions for leave to intervene out-of-time.

5. On January 21, 2020, the Virginia State Corporation Commission filed a motion for reconsideration and clarification that incorporated by reference its previously-filed comments. The Virginia State Corporation Commission's filing does not meet the Commission's requirements for submission of a rehearing request of a Commission order. As set forth in the Commission's Rules of Practice and Procedure, the Virginia State Corporation Commission's filing does not include a required "Statement of Issues," listing each issue with representative citations to the Commission and court precedent on which the Virginia State Corporation Commission is relying.[9] For this reason, we reject the Virginia State Corporation Commission's request for rehearing.

6. On February 10, 2020, Edison Electric Institute filed a motion for reconsideration, and on March 9, 2020, Dominion filed a motion to supplement its request for rehearing. EKPC submitted an answer in support of Dominion's supplemental request for rehearing on March 19, 2020. We find that these motions constitute untimely requests for rehearing of the December 2019 Order, and therefore reject them.[10] Under section 313 of

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motion to intervene in Docket No. ER18-1314-000, CPower is already a party to this consolidated proceeding.

[9] 18 C.F.R. § 385.713(c)(2) (2019); *see Revision of Rules of Practice & Procedure Regarding Issue Identification*, Order No. 663, 112 FERC ¶ 61,297, *order on reh'g*, Order No. 663-A, 114 FERC ¶ 61,284 (2006); *see also N.C. Waste Awareness & Reduction Network, Inc. v. Duke Energy Carolinas, LLC*, 153 FERC ¶ 61,189, at P 12 (2015) ("[T]he purpose of this requirement is to ensure that the filer, the Commission, and all other participants understand the issues raised by the filer, and to enable the Commission to respond to these issues and avoid wasteful litigation.")).

[10] We evaluate a pleading based on its substance, rather than its style or form. *See, e.g., Light Power & Gas of N.Y. LLC v. N.Y. Indep. Sys. Operator, Inc.*, 169 FERC

the Federal Power Act, an aggrieved party must file a request for rehearing within 30 days after the issuance of a Commission decision.[11] Because the 30-day rehearing deadline is a statutory requirement, it cannot be waived or extended. We also dismiss the rehearing requests submitted by the Office of the Attorney General of Maryland and Longroad Development Company, because, as non-parties, they are not eligible to seek rehearing.[12]

7. Talen PJM Companies; Old Dominion Electric Cooperative; the Market Monitor; EDF Renewables, Inc.;[13] and Longroad Development Company each filed answers to the requests for rehearing. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure[14] prohibits answers to a request for rehearing, and we will, therefore, reject them.

8. Motions for clarification were filed on January 24, 2020, by Advanced Energy Management Alliance (AEMA), and on February 19, 2020, by Monitoring Analytics, LLC, acting as PJM's Market Monitor (Market Monitor). On February 24, 2020, the Maryland Commission filed an answer to the Market Monitor's February 19, 2020 motion for clarification. We grant the Market Monitor's motion for clarification and discuss those clarifications below. We grant, in part, AEMA's motion for clarification, and reject it, in part, as an untimely request for rehearing.[15]

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¶ 61,216, at P 26 & n.63 (citing *Stowers Oil & Gas Co.*, 27 FERC ¶ 61,001, at 61,002 n.3 (1984) ("Nor does the style in which a petitioner frames a document necessarily dictate how the Commission must treat it.").

[11] 16 U.S.C. § 825*l*(a) (2018); 18 C.F.R. § 385.713(b) (2019).

[12] *See* 16 U.S.C. § 825*l*(a).

[13] Although styled as comments, the pleading is essentially an answer to a request for rehearing.

[14] 18 C.F.R. § 385.713(d)(1) (2019).

[15] Specifically, AEMA asks the Commission to clarify that a $0/MW-day default offer price floor for energy efficiency capacity resources is appropriate, *see* AEMA Motion at 5-7, which we reject as an out-of-time request for rehearing of the December 2019 Order's findings on the default offer price floor for energy efficiency resources. *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 144-145.

## IV. Substantive Matters

### A. Jurisdiction

#### 1. Requests for Rehearing and Clarification

9. Parties argue that the December 2019 Order violates the FPA by intruding into the states' exclusive jurisdiction over generation resources, attempting to unduly influence state decisions over resource mix decisions, and violating principles of cooperative federalism.[16] Parties state that the Commission's reach "extend[s] only to those matters which are not regulated by the States," and the power to shape the mix of generation resources is exclusively reserved to the states.[17] Clean Energy Associations further state that states have authority to enact laws and policies that protect their citizens from environmental harm.[18]

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[16] Maryland Commission Rehearing and Clarification Request at 8-9, 11, 14 (citing *Hughes v. Talen*, 136 S. Ct. 1288, 1300 (2016) (Sotomayor, J. concurring) ("In short, the Federal Power Act, like all collaborative federalism statutes, envisions a federal-state relationship marked by interdependence.")); DC Attorney General Rehearing Request at 3, 9-14; Clean Energy Associations Rehearing and Clarification Request at 1, 6; Advanced Energy Entities Rehearing and Clarification Request at 3; Exelon Rehearing and Clarification Request at 24-26; Public Power Entities Rehearing and Clarification Request at 11; OPSI Rehearing and Clarification Request at 3; New Jersey Board Rehearing and Clarification Request at 10-12; West Virginia Commission Rehearing Request at 1-2; Ohio Commission Rehearing Request at 7; Illinois Commission Rehearing Request at 6; PSEG Rehearing Request at 6-8; FES Rehearing Request at 2; AEP/Duke Rehearing and Clarification Request at 3, 5-10.

[17] DC Attorney General Rehearing Request at 9, 13 & n.45; AEP/Duke Rehearing and Clarification Request at 9 & n.20; Exelon Rehearing and Clarification Request at 24 (citing *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 57 (2d Cir. 2018) (*Zibelman*) (discussing dual regulatory scheme)); Maryland Commission Rehearing and Clarification Request at 10-11 (citing *Pac. Gas & Elec. v. State Energy Res. Conservation & Dev.*, 461 U.S. 190, 208 (1985)); PSEG Rehearing Request at 6; *see* 16 U.S.C. § 824(a), (b) (2018).

[18] Clean Energy Associations Rehearing and Clarification Request at 6 (citing 33 U.S.C. § 1251(b) ("It is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution . . . ."); *Cal. Coastal Comm'n v. Granite Rock Co.*, 480 U.S. 572, 582–84 (1987)); Ohio Commission Rehearing Request at 5 (averring that states have the responsibility to

10. Parties argue that the courts and the Commission have recognized states' authority over generation matters and decisions concerning fuel type, even if the state action affects the market clearing price. Recognizing that actions within the Commission's and states' jurisdictional realms may affect matters within the other's jurisdiction, parties argue that the FPA's dual jurisdiction is limited by the principle that neither the states nor the Commission may impose measures that target or otherwise aim at the other's areas of exclusive jurisdiction.[19] Exelon argues that while the December 2019 Order does not directly regulate generation, the Commission may not attempt to override state choices concerning the generation mix by refusing to consider and compensate the capacity provided by state-preferred resources, just as states may not attempt to adjust wholesale rates by linking state payments to participation in, and clearing, the capacity market.[20] The New Jersey Board argues that, if FPA section 201(b) is to have any meaning, there must be a limit as to how far the Commission can encroach on state jurisdiction,[21] adding that the December 2019 Order creates a regulatory gap by disavowing an intent to control environmental externalities, while effectively preventing states from addressing climate change and pollution.[22]

11. The Maryland Commission contends the Commission improperly intrudes into an area of traditional and exclusive state jurisdiction, namely the valuation of the environmental attributes of generation for state health and welfare purposes.[23] The Maryland Commission argues the expanded MOPR is intended to impede or prevent state-supported resources, including renewable resources, from clearing the capacity market, thereby thwarting state public policy decisions affecting environmental

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consider the health, safety, and welfare of the public and cannot make decisions based on the Commission's narrow focus).

[19] PSEG Rehearing Request at 6-7 (citing *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760, 776 (2016) (*EPSA*); *Oneok, Inc. v. Learjet, Inc.* (*Oneok*), 135 S. Ct. 1591, 1600 (2015); *Coal. for Competitive Elec. v. Zibelman*, 272 F. Supp. 3d 554, 576 (S.D.N.Y. 2017), *aff'd sub nom*. *Zibelman*, 906 F.3d 41); *see also* Illinois Commission Rehearing Request at 6; Clean Energy Associations Rehearing and Clarification Request at 12 (citing *Hughes*, 136 S. Ct. at 1298-99; *Oneok*, 135 S. Ct. at 1600).

[20] Exelon Rehearing and Clarification Request at 25-26.

[21] New Jersey Board Rehearing and Clarification Request at 14.

[22] *Id*. at 18 (citing *EPSA*, 136 S. Ct. at 780 (stating that the FPA makes state and federal powers complementary, disavowing a regulatory "no man's land")).

[23] Maryland Commission Rehearing and Clarification Request at 8.

attributes.[24] The Maryland Commission specifically contends that the December 2019 Order unlawfully asserts Commission authority over renewable energy credits (RECs). The Maryland Commission alleges that the Commission has found it lacks jurisdiction over credits unbundled from wholesale energy because they do not affect wholesale electricity rates, and that the December 2019 Order reflects an unsupported departure from Commission precedent.[25] Likewise, the Illinois Commission argues that the Commission has previously "concluded that state programs that incentivize clean energy generation are consistent with FERC's policy objectives."[26] The Illinois Commission faults the Commission for treating zero emission credits (ZECs) as an instrument of price suppression rather than recognizing that the purpose of state statutes authorizing ZECs and renewable portfolio standards (RPS) policies is to obtain public health and welfare objectives.[27]

12. Parties argue that the December 2019 Order unlawfully intrudes on the states' jurisdiction over generation resources by adopting market rules that counteract state preferences for certain types of generation.[28] Parties contend that the December 2019 Order nullifies state policies regulating in-state generation facilities by erecting an entry barrier that many, if not most, new generation resources will be unable to surmount,

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[24] *Id.*at 8, 10.

[25] *Id.* at 6, 12 (citing *WSPP Inc.*, 139 FERC 61,061, at PP 18, 21 (2012); *Grand Council of Crees v. FERC*, 198 F.3d 950, 956-57 (D.C. Cir. 2000)).

[26] Illinois Commission Rehearing Request at 7 (citing *Coal. for Competitive Elec.*, 272 F. Supp. 3d at 577).

[27] Illinois Commission Rehearing Request at 13. The Illinois Commission explains that the payment of one ZEC is equal to the social cost of carbon and is designed to compensate the environmental attributes associated with one MW hour of zero emitting nuclear generation, which is not valued in the PJM capacity market. *Id.*

[28] Exelon Rehearing and Clarification Request at 25; Maryland Commission Rehearing and Clarification Request at 6, 8, 10; West Virginia Commission Rehearing Request at 2; PSEG Rehearing Request at 8; Public Citizen Rehearing Request at 3 (citing December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 7)); Clean Energy Advocates Rehearing Request at 87-88 (citing *Conn. Dep't of Pub. Util. Control v. FERC*, 569 F.3d 477, 481-82 (D.C. Cir. 2009) (*Connecticut PUC*)); AEP/Duke Rehearing and Clarification Request at 9 & nn.19-20 (citations omitted) (mitigating retail rate riders violates the FPA by targeting states' authority over generation facilities and what generation costs are appropriate to include in retail rates).

meaning that states will not be able to use their preferred generation resources,[29] and instead induces new entry and continued operation of the Commission's preferred resources.[30] The end result, parties assert, is that the December 2019 Order makes it far less likely that state-preferred resources will be developed because they likely would not clear in the capacity market.[31] Pointing out that the Commission determined it could not apply the MOPR in a way that nullifies federal law, so too, these parties argue, the Commission may not implement the MOPR to nullify state laws.[32]

13. This intrusion was further unlawful, parties contend, because the December 2019 Order did not establish that the State Subsidies at issue actually affect wholesale rates.[33] Clean Energy Associations argue that, because virtually all indirect and tangential inputs to generation or requiring a jurisdictional utility to build a power plant could be said to affect wholesale electric rates, the Supreme Court adopted "a common-sense construction

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[29] Clean Energy Associations Rehearing and Clarification Request at 8-10; Exelon Rehearing and Clarification Request at 25; Maryland Commission Rehearing and Clarification Request at 6, 8, 10; West Virginia Commission Rehearing Request at 2; PSEG Rehearing Request at 8; Public Citizen Rehearing Request at 3 (citing December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 7); AEP/Duke Rehearing and Clarification Request at 3, 5-10; Clean Energy Advocates Rehearing Request at 87-88; OPSI Rehearing and Clarification Request at 4 (citing December 19 Order, 169 FERC ¶ 61,239 at PP 37-38; *Hughes*, 136 S. Ct. at 1299 ("Nothing in this opinion should be read to foreclose [states] from encouraging production of new or clean generation through measures 'untethered to a generator's wholesale market participation.'")); *see* 16 U.S.C. § 824(b).

[30] Exelon Rehearing and Clarification Request at 25; *see also* Clean Energy Advocates Rehearing Request at 85.

[31] *See, e.g.*, Clean Energy Associations Rehearing and Clarification Request at 8; AEP/Duke Rehearing and Clarification Request at 3, 5-10; Clean Energy Advocates Rehearing Request at 87-88; OPSI Rehearing and Clarification Request at 4.

[32] Clean Energy Associations Rehearing and Clarification Request at 10-11 (citing December 2019 Order, 169 FERC ¶ 61,239 at PP 7, 89); FES Rehearing Request at 9 (citing December 2019 Order, 169 FERC ¶ 61,239 at PP 7, 10, 19-20); OPSI Rehearing and Clarification Request at 5; Public Power Entities Rehearing and Clarification Request at 16; Maryland Commission Rehearing and Clarification Request at 9-13 (arguing that state jurisdiction is a function that Congress reserved to the states); *see also infra* PP 118-124 (Federal Subsidies) (responding to similar arguments).

[33] Public Power Entities Rehearing and Clarification Request at 15; Clean Energy Associations Rehearing and Clarification Request at 35.

of the FPA's language, limiting [the Commission's] 'affecting' jurisdiction to rules or practices that directly affect the wholesale rate,"[34] while simultaneously preserving a state's right to enact generation policies and to offer incentives that are "untethered to how the affected generators are to perform in the wholesale market."[35] As a result, Clean Energy Associations contend, states "may regulate within the domain Congress assigned to them even when their laws incidentally affect areas within [the Commission's] domain,"[36] and state policies that affect auction prices by increasing the quantity of power available are permissible.[37]

14. Disagreeing with the Commission's reasoning that "a State Subsidy need not be facially preempted to require corrective action,"[38] the Illinois Commission states that nothing in *EPSA* suggests that the Commission may zero out state environmental policies related to energy regulation, and that, rather than accommodating states, the December 2019 Order sets forth a rate that prevents states from exercising such powers contrary to the courts in *EPSA* and *Hughes*.[39] Likewise, the New Jersey Board points out, unlike the

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[34] Clean Energy Associations Rehearing and Clarification Request at 6-7 (citing *EPSA*, 136 S. Ct. at 774 (emphasis omitted) (internal quotations and citations omitted)).

[35] Clean Energy Associations Rehearing and Clarification Request at 7 (citing *Hughes*, 136 S. Ct. at 1299 (citation omitted); *see also Vill. of Old Mill Creek v. Star*, No. 17 CV 1163, 2017 WL 3008289, at *11 (N.D. Ill. July 14, 2017) ("EPSA explained that FERC cannot take action that transgresses states' authority over generation, no matter how direct, or dramatic, the program's impact on wholesale rates." (internal quotations and citations omitted; emphasis added)), *aff'd sub nom. Elec. Power Supply Ass'n v. Star*, 904 F.3d 518 (7th Cir. 2018) (*Star*), *cert. denied*, 139 S. Ct. 1547 (2019)); *see also* SMECO Rehearing Request at 3, 6 (asserting that, by not exempting self-supply resources, the Commission usurps states' authority over generation resources).

[36] Clean Energy Associations Rehearing and Clarification Request at 7 (citing *Hughes*, 136 S. Ct. at 1298).

[37] Clean Energy Associations Rehearing and Clarification Request at 7 (citing *Star*, 904 F.3d at 523-24; *Zibelman*, 906 F.3d at 54).

[38] December 2019 Order, 169 FERC ¶ 61,239 at P 68.

[39] Illinois Commission Rehearing Request at 8 (citing *Star*, 904 F.3d at 524; *Hughes*, 136 S. Ct. at 1299).

state programs found to be federally preempted, the state programs at issue in the December 2019 Order are not "directed at" or "tethered to" the capacity market.[40]

### 2. **Commission Determination**

15. We deny rehearing requests asserting that the December 2019 Order improperly intrudes on matters within the states' jurisdiction and affirm the December 2019 Order's findings on this matter. The Commission has jurisdiction to regulate the regional transmission organization's (RTO) procurement of capacity.[41]

16. The court's decision in *NJBPU* demonstrates that the findings from the December 2019 Order are within the Commission's jurisdiction. There, the U.S. Court of Appeals for the Third Circuit upheld the Commission's decision in 2013 to eliminate the MOPR's state mandate exemption, thus subjecting state-sponsored new natural gas-fired resources to the MOPR, finding that the Commission acted within its jurisdiction.[42] Rejecting similar arguments that the Commission exceeded its jurisdiction by subjecting state-supported resources to PJM's MOPR, the court found that the Commission acted within its jurisdiction over wholesale markets because New Jersey's subsidization of natural gas-fired resources affected wholesale capacity prices.[43] The relevant facts are the same here. State support for generation resources directly affects wholesale rates and practices in the FERC-regulated PJM capacity market, falling squarely within the Commission's exclusive jurisdiction, requiring the Commission to act to ensure just and reasonable

[40] New Jersey Board Rehearing and Clarification Request at 12.

[41] *Connecticut PUC*, 569 F.3d at 482 ("Petitioners are thus compelled to concede that the Commission may directly establish prices for capacity—or much the same, prices for failing to acquire enough capacity—even for the express purpose of incentivizing construction of new generation facilities."); *Muns. of Groton v. FERC*, 587 F.2d 1296, 1301 (D.C. Cir. 1978) (affirming the Commission's jurisdiction to impose a deficiency charge for failing to meet capacity requirements because that charge "affects the fee that a participant pays for power and reserve service").

[42] *N.J. Bd. of Pub. Util. v. FERC*, 744 F.3d 74, 96-98 (D.C. Cir. 2014) (*NJBPU*).

[43] *Id*.

capacity market prices.[44] Under these circumstances, the Commission is within its jurisdiction to set wholesale rates in response to state policy decisions.[45]

17. Further, subjecting resources that receive a State Subsidy (hereinafter referred to as State-Subsidized Resources) to the default offer price floors does not amount to the direct regulation of generation facilities, nor does it prohibit states from using preferred resources. In *NJBPU*, the court determined that the Commission did not intrude on the state's jurisdiction to determine its resource mix or prevent the state from promoting chosen resources because, in applying the MOPR to State-Subsidized Resources, the Commission did not stop the state from supporting preferred resources, but only required that if State-Subsidized generation is used to meet capacity obligations through PJM's capacity market, the resource must clear the capacity market on a competitive basis.[46]

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[44] *See* 16 U.S.C. §§ 824, 824d, 824e (2018); *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022, at P 143 (2011 MOPR Order), *reh'g denied*, 137 FERC ¶ 61,145, at P 3 (2011) (2011 MOPR Rehearing Order) ("While the Commission acknowledges the rights of states to pursue legitimate policy interests, and while, as we have said, any state is free to seek an exemption from the MOPR under section 206, it is our duty under the FPA to ensure just and reasonable rates in wholesale markets. . . . Because below-cost entry suppresses capacity prices, and because the Commission has exclusive jurisdiction over wholesale rates, the deterrence of uneconomic entry falls within the Commission's jurisdiction, and we are statutorily mandated to protect the [capacity market] against the effects of such entry."), *aff'd sub nom*. *NJBPU*, 744 F.3d 74, *cited in Hughes*, 136 S. Ct. at 1296.

[45] Indeed, the U.S. Court of Appeals for the Seventh Circuit, in discussing the Commission's actions in this very proceeding, stated that the Commission "has taken [state subsidy decisions] as givens and set out to make the best of the situation they produce." *Star*, 904 F.3d at 524; *see also EPSA*, 136 S. Ct. at 776 ("When FERC sets a wholesale rate, when it changes wholesale market rules, when it allocates electricity as between wholesale purchasers—in short, when it takes virtually any action respecting wholesale transactions—it has some effect . . . on retail rates. That is of no legal consequence.").

[46] *NJBPU*, 744 F.3d at 97-98. We disagree with Clean Energy Advocates that the court's decision in *Connecticut PUC* leads to a different conclusion. In *Connecticut PUC*, the court held that the Commission did not directly regulate generation facilities by requiring resources to meet installed capacity requirements. 596 F.3d at 481-82. The capacity rules at issue in *Connecticut PUC*, like here, did not actually require states to build new capacity or impose other specific requirements on states. Rather the rules at issue in Connecticut PUC merely set peak demand estimates for capacity and sought to create a price through market forces that was sufficient to meet demand. The replacement rate at issue here likewise determines wholesale capacity market rules, i.e.,

Likewise, under the replacement rate, the Commission is neither requiring nor prohibiting state action. States remain free to support preferred resources; the replacement rate only ensures that state choices do not adversely affect the wholesale capacity market and that capacity prices appropriately incent the entry and exit of resources. As the Commission stated in the December 2019 Order, "[n]or does this order prevent states from making decisions about preferred generation resources: resources that states choose to support, and whose offers may fail to clear the capacity market under the revised MOPR directed in this order, will still be permitted to sell energy and ancillary services in the relevant PJM markets."[47]

18. Nor, as parties contend, has the Commission asserted jurisdiction over unbundled REC transactions, or acted contrary to the Commission's decision in *WSPP*,[48] by finding that State-Subsidized Resources participating in the capacity market must offer at a competitive price. The Commission determined in *WSPP* that an unbundled REC transaction was independent of a wholesale electric energy transaction and thus did not affect wholesale electricity rates such as to trigger the Commission's jurisdiction over the sale of unbundled RECs.[49] In this proceeding, the Commission did not find that it has jurisdiction over unbundled REC transactions, nor does the December 2019 Order dictate how RECs are managed. The orders in this proceeding only find that REC revenues, like other out-of-market support, permit a resource to offer below its costs, thereby affecting the wholesale capacity price. Under these circumstances, REC revenues can no longer be characterized as "independent" from jurisdictional sales.

19. Parties assert that State-Subsidized Resources are not likely to clear the capacity auction, thwarting state decisions about the generation mix and state policies aimed at achieving particular public health and welfare objectives, and nullifying the capacity offered by these resources. However, if a State-Subsidized Resource does not clear the capacity auction, it is because it was not competitive in the multi-state wholesale capacity market and not needed for regional resource adequacy. States may still support resources

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the default offer price floors at which State-Subsidized Resources must offer, subject to exemptions to demonstrate competitiveness, so that the price for capacity meets the regions' resource adequacy objectives. *See* December 2019 Order, 169 FERC ¶ 61,239 at P 7.

[47] December 2019 Order, 169 FERC ¶ 61,239 at P 7.

[48] *See WSPP*, 139 FERC ¶ 61,061 at P 24 (finding, based on the facts in *WSPP*, that transactions for unbundled RECs are outside the Commission's jurisdiction because unbundled REC transactions do not affect wholesale electricity rates and the charge for the unbundled REC is not a charge in connection with a wholesale electric transaction).

[49] *Id*.

that do not clear the capacity auction even if such resources may not be used to satisfy PJM capacity market obligations.[50] Moreover, the replacement rate provides vehicles to demonstrate competitiveness and avoid mitigation through the Competitive Exemption and Unit-Specific Exemption.

20. Parties contend that the December 2019 Order unlawfully intrudes on state jurisdiction because the Commission failed to find that State Subsidies actually distort wholesale rates, which they assert is a prerequisite to Commission jurisdiction. However, the June 2018 Order squarely found that out-of-market payments, which include all State Subsidies, distort wholesale capacity prices, compromising market integrity.[51] The December 2019 Order establishes a just and reasonable replacement rate to address the effects of State Subsidies on the wholesale capacity market.

21. The Illinois Commission contends that *Star* stands for the proposition that the Commission may not zero out state environmental policies related to energy regulation and the December 2019 Order ran afoul of this prohibition.[52] We disagree and find that the December 2019 Order falls squarely within the confines of *Star*. As an initial matter, the court in *Star* dealt only with the question of preemption, not with Commission jurisdiction. *Star*, however, confirmed that, to the extent state efforts to support certain resource types in pursuit of state policy goals affect interstate sales, which is "an inevitable consequence of a system in which power is shared between state and national governments," the Commission may make adjustments based on those effects.[53] The Commission has exclusive regulatory authority over wholesale rates, and a statutory obligation to ensure that wholesale capacity rates in the multi-state PJM region are just and reasonable.[54] As such, "when subsidized [resources] supported by one state's or

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[50] *Connecticut PUC*, 569 F.3d at 481 (explaining that states are free to make their own decisions, but they will bear the costs of those decisions).

[51] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,034 at PP 26-27 (June 2018 Rehearing Order); June 2018 Order, 163 FERC ¶ 61,236 at PP 153-154; December 2019 Order, 169 FERC ¶ 61,239 at PP 37-38.

[52] Illinois Commission Rehearing Request at 8 (citing *Star*, 904 F.3d at 524).

[53] *Star*, 904 F.3d at 524. The court specifically pointed to the June 2018 Order and explained that, rather than deeming state programs such as the ZEC program preempted, the Commission in the June 2018 Order "has taken them as givens and set out to make the best of the situation they produce." *Id*.

[54] 16 U.S.C. § 824e(b); *Hughes*, 136 S. Ct. at 1291; *Nantahala Power & Light Co. v. Thornburg*, 476 U.S. 953, 966 (1986); *see also* December 2019 Order, 169 FERC ¶ 61,239 at P 7 n.23 (citing authorities).

locality's policies has the effect of disrupting the competitive price signals that PJM's [capacity auction] is designed to produce, and that PJM as a whole, including other states, rely on to attract sufficient capacity," our statutory mandate requires the Commission to intervene.[55] Nothing in the December 2019 Order forecloses states from sponsoring resources of any type, including new, renewable, or zero-emission resources. The December 2019 Order only finds that where states are permissibly acting within their jurisdiction, and those actions directly affect the wholesale market, then the Commission has jurisdiction to respond in order to ensure just and reasonable wholesale rates.

## B. Expanded MOPR

### 1. Procedural Arguments

#### a. Requests for Rehearing and Clarification

22. The Maryland Commission argues that the Commission erred in establishing a replacement rate by expanding PJM's MOPR-Ex proposal, a proposal the Commission found unjust and unreasonable, without first ruling on the rehearing requests in Docket No. ER18-1314-000. The Maryland Commission contends that this procedural error prevents aggrieved parties from seeking judicial review of the Commission's underlying decisions.[56] The Maryland Commission also avers that due process is being denied if the Commission does not act on rehearing of both the June 2018 Order and the December 2019 Order prior to the next capacity auction.[57] Parties assert that the Commission must act within thirty days of the receipt of rehearing requests challenging the underlying orders since refunds are not being issued in this proceeding and there is no other form of remediation.[58] Similarly, Clean Energy Associations argue that the Commission failed to show that PJM's existing capacity market is unjust and unreasonable in the June 2018 Order and has not yet acted on the June 2018 Order rehearing requests.[59] This is a

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[55] December 2019 Order, 169 FERC ¶ 61,239 at P 68 (quoting 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 3).

[56] Maryland Commission Rehearing and Clarification Request at 6-7, 16-17 (citing *Allegheny Def. Project v. FERC*, 932 F.3d 940 (D.C. Cir. 2019)); *see also* New Jersey Board Rehearing and Clarification Request at 10.

[57] Maryland Commission Rehearing and Clarification Request at 17.

[58] *Id.* at 17 & n.37 (citing *Allegheny Def. Project*, 932 F.3d at 950-56 (Millet, J., concurring)); New Jersey Board Rehearing and Clarification Request at 42 & n.239 (same).

[59] Clean Energy Associations Rehearing and Clarification Request at 18.

problem, parties contend, because the December 2019 Order selectively re-affirmed conclusions from the June 2018 Order, while dodging issuance of a formal rehearing order of the June 2018 Order, which prevents parties from being able to seek judicial review.[60] Accordingly, Clean Energy Associations argue that the Commission should avoid finalizing any obligation imposed on PJM in this proceeding until parties receive a final decision on petitions for rehearing of the June 2018 Order.[61]

**b. <u>Commission Determination</u>**

23. We disagree with assertions that the timing of the Commission's actions violated parties' due process rights[62] or compromised the reasonableness of the Commission's expansion of the MOPR to establish a just and reasonable replacement rate. In issuing the orders in this proceeding, the Commission took the time needed to "thoroughly

[60] Clean Energy Advocates Rehearing Request at 36; Clean Energy Associations Rehearing and Clarification Request at 56 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 5 ("We affirm our initial finding that '[a]n expanded MOPR with few or no exceptions, should protect PJM's capacity market from the price-suppressive effects of resources receiving out-of-market support by ensuring that such resources are not able to offer below a competitive price.'" (quoting June 2018 Order, 163 FERC ¶ 61,236 at P 158)); *id*. P 32 ("In the June 2018 Order, the Commission preliminarily found that PJM should expand the MOPR to cover out-of-market support to all new and existing resources, regardless of the resource type, with few or no exceptions. We reaffirm that finding."); *id*. P 72 ("Consistent with Commission precedent, the June 2018 Order is premised on the finding that, as a general matter, resources receiving out-of-market support are capable of suppressing market prices. We continue to uphold that finding here.").

[61] Clean Energy Associations Rehearing and Clarification Request at 57-58.

[62] "Due process generally requires a 'meaningful opportunity' to be heard before one is deprived of life, liberty or property." *Blumenthal v. FERC*, 613 F.3d 1142, 1146 (D.C. Cir. 2010) (citing *BSNF Ry. Co. v. Surface Transp. Bd.*, 453 F.3d 473, 486 (D. C. Cir. 2006) (quoting *Matthews v. Eldridge*, 424 U.S. 319, 349 (1976)).

consider"[63] the issues raised.[64] Contrary to the Maryland Commission's contention, the Commission did not err by installing a replacement rate before acting on rehearing requests in Docket No. ER18-1314-000. The statute does not require the Commission to act on rehearing requests contesting the finding that an existing rate is unjust and unreasonable before setting a just and reasonable replacement rate in an FPA section 206 proceeding.[65] The December 2019 Order's directive concerning the issues to be addressed in the compliance filing implementing the replacement rate also are not related to, or dependent on, whether the Commission grants rehearing of the June 2018 Order, as the rehearing requests are limited to whether the Commission arbitrarily or capriciously

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[63] *Blumenthal*, 613 F.3d at 1147. In *Blumenthal*, among other things, Connecticut argued that it was denied due process because it did not have an opportunity to respond to ISO New England's executive compensation filings before the Commission issued its initial decision. Noting that Connecticut had such an opportunity and took advantage of it when filing its petition for rehearing, "which [the Commission] in turn thoroughly considered," the Court dismissed this argument. *Id.* at 487. Similarly, we find parties were not denied due process because they had the opportunity and availed themselves of the opportunity to seek rehearing of both the June 2018 Order and the December 2019 Order. Furthermore, the Maryland Commission has not identified the constitutionally-protected interest it is seeking to protect. But, in any event, even assuming arguendo there is a constitutionally-protected interest, the Maryland Commission's contention that due process is violated unless the Commission acts on rehearing of these orders before the next Base Residual Auction (BRA) is moot, as the Commission has acted on rehearing of both orders prior to the next BRA.

[64] Parties note a recent decision regarding the Commission's use of tolling orders, which grant rehearing for the purpose of further consideration. *See, e.g.*, Maryland Commission Rehearing and Clarification at 17 & n.37 (citing *Allegheny Def. Project*, 932 F.3d at 950-56 (Millet, J., concurring). The *Allegheny* case is still pending on rehearing en banc before the D.C. Circuit Court of Appeals, however, and the Commission is following existing precedent that allows reliance on tolling orders. *See, e.g.*, *Cal. Co. v. FERC*, 411 F.2d 720 (D.C. Cir. 1969).

[65] 16 U.S.C. § 824e(a) (authorizing the Commission to change an existing rate "[w]henever the Commission . . . shall find that [the] rate . . . is unjust[ ] [or] unreasonable"); *see Emera Me. v. FERC*, 854 F.2d 9, 24 (D.C. Cir. 2016) (stating the Commission has "undoubted power under section 206" to change an existing rate "*whenever it determines such rate*[ ] *to be unlawful*") (quoting *FPC v. Sierra Pac. Power Co.*, 350 U.S. 348, 353 (1956) (emphasis in *Emera Maine*)).

found PJM's existing Tariff unjust and unreasonable.[66] This rehearing order relates only to the second prong of the Commission's duty under FPA section 206—choosing the just and reasonable replacement rate to be thereafter observed.[67] The Commission has broad discretion over how to manage its proceedings[68] and reasonably prioritized the establishment of a just and reasonable replacement rate.[69]

24. In any event, we are denying rehearing of the June 2018 Order in a contemporaneously issued order.[70] Having now, via this order and the order on rehearing of the June 2018 Order, addressed parties' rehearing requests on both prongs of section 206 of the FPA, the Commission has fulfilled its statutory obligations.[71]

### 2. <u>Justification for Expanded MOPR</u>

#### a. <u>Requests for Rehearing and Clarification</u>

25. Parties contend that application of the expanded MOPR to all new and existing State-Subsidized Resources, absent exemption, is unjust and unreasonable, unduly discriminatory, arbitrary and capricious and lacking substantial evidence, in violation of

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[66] No parties objected to the Commission's determination to reject PJM's initial filing in Docket No. ER18-1314-000.

[67] *See Md. Pub. Serv. Comm'n v. FERC*, 632 F.3d 1283, 1285 n.1 (D.C. Cir. 2001) ("It is the Commission's job . . . to find a just and reasonable rate.").

[68] *See, e.g.*, *Mobil Oil Expl. & Prod. Se. Inc. v. United Distrib. Cos*., 498 U.S. 211, 230 (1991) ("An agency enjoys broad discretion in determining how best to handle related, yet discrete, issues in terms of procedure . . . [such as] where a different proceeding would generate more appropriate information[.]") (citations omitted); *see also Stowers Oil & Gas Co.*, 27 FERC ¶ 61,001 at n.3 ("It is within the Commission's purview to determine how best to allocate its resources for the most efficient resolution of matters before it.").

[69] We further note that, as this proceeding was consolidated, and the Commission had the benefit of a full record before acting in the December 2019 Order, the timing of the Commission's actions did not affect the reasonableness of the replacement rate established in the December 2019 Order.

[70] June 2018 Rehearing Order, 171 FERC ¶ 61,034 (2020).

[71] *See FirstEnergy Serv. Co. v. FERC*, 758 F.3d 346, 353 (D.C. Cir. 2014) (stating that the Commission is required to shoulder the dual burden when it institutes a section 206 proceeding).

the FPA. Parties argue that expanding the MOPR based on the theory that out-of-market support suppresses capacity prices is not based on sufficient evidence because the December 2019 Order failed to show that State Subsidies suppress capacity prices. AES argues that the fact that many market participants offer in to the PJM capacity market as price takers does not, in itself, indicate that out-of-market revenues exist or that price suppression is occurring.[72] According to Clean Energy Associations, the December 2019 Order's reliance on a 2011 Commission order in an ISO New England, Inc. proceeding to justify the finding that out-of-market support suppresses capacity prices is misplaced, as that order primarily addressed whether the capacity market provided sufficient income to incentivize market entry and mitigate market power, and did not mitigate as many subsidies as the December 2019 Order.[73]

26. ELCON argues the Commission erred in not providing a quantitative assessment of price suppression.[74] ELCON further contends that PJM's analysis of its MOPR-Ex proposal is not sufficient evidence to justify the replacement rate, because the two applications of the MOPR differ.[75]

27. Parties claim that the capacity market is functioning well, indicating that out-of-market support does not suppress prices. For example, parties argue that the 2018 annual capacity auction produced a higher clearing price than prior years despite the existence of State Subsidies.[76] The Illinois Attorney General offers the example of the ComEd Locational Deliverability Area (LDA) in which prices *increased* after the provision of ZECs to certain nuclear facilities by the Illinois General Assembly in early 2017.[77]

28. Parties also argue that the PJM capacity market has excess capacity or a high reserve margin and that there is therefore no immediate problem to remedy by the

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[72] AES Rehearing and Clarification Request at 11.

[73] Clean Energy Associations Rehearing and Clarification Request at 31 (citing *ISO New England Inc.*, 135 FERC ¶ 61,029, at P 15 (2011) (2011 ISO-NE MOPR Order) (resources receiving out-of-market support are capable of suppressing market prices, regardless of intent); *see* December 2019 Order, 169 FERC ¶ 61,239 at P 72 (reiterating June 2018 Order statement that out-of-market support suppresses capacity prices).

[74] ELCON Rehearing Request at 4; Ohio Commission Rehearing Request at 6.

[75] ELCON Rehearing Request at 8-9.

[76] Illinois Attorney General Rehearing Request at 6.

[77] *Id*. (citing McCullough Aff. at 11-20; McCullough Responsive Aff. at 2, 5-7).

replacement rate.[78] The Pennsylvania Commission argues the Commission failed to consider evidence that an expanded MOPR will worsen the existing over-procurement of capacity because State-Subsidized Resources will continue to be developed regardless of whether they clear the capacity market.[79] The Illinois Attorney General argues the Commission ignored evidence and arguments illuminating the fact that PJM has a large number of natural gas-fired resources in its generation interconnection queue in advanced stages of development, indicating that new generation is being incented at current capacity prices.[80]

29. The Ohio Commission also argues that it is arbitrary and capricious to increase costs today to stave off a speculative and hypothetical future concern regarding price suppression.[81] Exelon argues that the Commission may make predicative judgments, but such judgments must still be grounded in record evidence and consider evidence contradicting that prediction, contending that the Commission failed to explain why allowing public policy concerns to guide entry and exit decisions renders the capacity market unjust and unreasonable, or cite evidence that the growth of State Subsidies erodes investor and consumer reliance on capacity market price signals.[82]

30. Exelon argues that the basis in the December 2019 Order for applying the MOPR is premised on the idea that an efficient market is one unaffected by state environmental attribute payments, and that a competitive offer price is based solely on a resource's production costs, ignoring economic principles that an efficient market must account for externalities of production like pollution.[83] Arguing that emitting generators are not more

[78] Ohio Commission Rehearing Request at 9, 12-13 (asserting that because PJM has a capacity abundance, clearing prices are not unjust and unreasonably suppressed); FES Rehearing Request at 15 n.60; Exelon Rehearing and Clarification Request at 10-15 (noting the 22% reserve margin, that the auction attracts new entry despite low prices and oversupply, 40 GW of new gas in development); Clean Energy Advocates Rehearing Request at 80-81; DC Attorney General Rehearing Request at 13-14 & n.47 (citing evidence that PJM's capacity market reflects "high prices, high reserve margins, and 'strong new entry despite relatively flat demand'").

[79] Pennsylvania Commission Rehearing and Clarification Request at 7; Illinois Attorney General Rehearing Request at 9.

[80] Illinois Attorney General Rehearing Request at 8-9.

[81] Ohio Commission Rehearing Request at 14.

[82] Exelon Rehearing and Clarification Request at 14-15.

[83] *Id*. at 16-18.

efficient simply because they can submit lower priced offers, Exelon states that, in reality, emitting generators are not efficient because they do not internalize the costs of their pollution and that the December 2019 Order did not reconcile how counteracting state programs addressing externalities could result in greater inefficiencies.[84]

31. Parties argue that the December 2019 Order does not address evidence that an expanded MOPR might result in unnecessary price increases.[85] ELCON argues that the Commission erred in not providing any actual demonstration of monopsony power or other market failure, or quantitative assessment or economic theory explaining why the replacement rate will correct price suppression and not simply raise prices above the competitive level.[86]

32. The Illinois Attorney General argues that the December 2019 Order is not based on substantial evidence because the Commission ignored evidence that PJM's existing market is rife with the exercise of market power and that a broadly-applied MOPR would exacerbate the problem because, by forcing some resources to offer above a level likely to clear, it reduces the number of resources available to offer supply.[87] The Illinois Attorney General argues that existing market power can be seen in the ComEd LDA in which generators that control roughly 40% of that market can strategically offer up to PJM's offer cap through portfolio bidding, driving capacity clearing prices above competitive levels.[88] The Illinois Attorney General then adds that, because the expanded MOPR sets prices administratively and publicly, market participants will have additional

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[84] *Id*. at 17-18 (contending that if forced to bear costs of pollution, aging emitting generators would exit the market, rather than being permitted to remain in the market because they can submit offers below what would be truly competitive factoring in pollution costs).

[85] OPSI Rehearing and Clarification Request at 6 (citing OPSI Comments at § B; *New England Power Generators Ass'n v. FERC*, 881 F.3d 202, 212 (D.C. Cir. 2012)).

[86] ELCON Rehearing Request at 4.

[87] Illinois Attorney General Rehearing Request at 3 (citing Illinois Attorney General Initial Testimony at 8-17 (filed Oct. 2, 2018)); *see also* ELCON Rehearing Request at 9 (arguing the replacement rate would limit competition by removing suppliers from the market, by virtue of requiring them to offer higher, which will tend to increase prices).

[88] Illinois Attorney General Rehearing Request at 4 (citing Market Monitor Initial Testimony at 15-16 (filed Oct. 2, 2018)).

knowledge regarding the offers of their competitors, allowing them to offer above their costs, especially if the State-Subsidized Resource is marginal.[89]

33. Clean Energy Associations assert that the Commission provided no economic theory for its broad application of MOPR in the December 2019 Order, arguing that application of buyer-side market power mitigation in the absence of anticompetitive concerns could hamper low offers that are competitive and reflect truly low costs, where costs include offsets of subsidies based on positive environmental externalities that are not otherwise reflected in market operations.[90]

34. The Ohio Commission argues that the Commission misstated facts regarding Ohio House Bill 6, which the December 2019 Order cited as evidence of increased out-of-market support.[91] The Ohio Commission explains that the cumulative effect of House Bill 6 is instead to reduce the total amount of state support available.[92]

**b. Commission Determination**

35. We find substantial record evidence supporting the December 2019 Order, and affirm that the expanded MOPR, as modified on rehearing, is a just and reasonable approach to "protect[ing] PJM's capacity market from the price-suppressive effects of resources receiving out-of-market support by ensuring that such resources are not able to offer below a competitive price."[93] We affirm our conclusion that a replacement rate that retains PJM's current review of new natural gas-fired resources under the MOPR and expands the MOPR to include both new and existing resources, internal and external, that receive or are entitled to receive State Subsidies, is a just and reasonable and not unduly

[89] Illinois Attorney General Rehearing Request at 4-5.

[90] Clean Energy Associations Rehearing and Clarification Request at 21-22.

[91] Ohio Commission Rehearing Request at 19 (citing December 2019 Order, 169 FERC ¶ 61,239 at PP 7, 8, 16).

[92] *Id*. at 22.

[93] December 2019 Order, 169 FERC at P 5 & n.11 (quoting June 2018 Order, 163 FERC ¶ 61,236 at P 158). We note that parties made many of the same, if not identical, arguments on rehearing of the June 2018 Order, which are also addressed in the June 2018 Rehearing Order issued concurrently with this order.

discriminatory or preferential solution to address the price-distorting effect of State-Subsidized Resources.[94]

36. The extensive record in this consolidated proceeding documents the increase in State Subsidies in the PJM region, beginning with the complaint filed by Calpine and others, which, among other things, cited the Illinois ZEC program (ZECs payable to a 1,400 MW nuclear facility) as evidence of a State Subsidy that will have a price suppressing effect on PJM's capacity market.[95] In its section 205 filing in Docket No. ER18-1314-000, PJM explained that many of the same states that chose to restructure their electricity services and introduce greater competition 20 years ago are now increasingly seeking to support capacity outside PJM's wholesale capacity market to encourage development or retention of select resources with attributes they favor.[96] In addition to Illinois' ZEC program, PJM identified the following examples of these state programs: (1) pending (now existing) legislation in New Jersey that would provide similar payments for up to 3,360 MW at the Salem and Hope Creek nuclear facilities; (2) off-shore wind procurement programs in Maryland (250 MW) and New Jersey (1,100 MW); and (3) RPS programs in various states in the PJM region, including New Jersey, Delaware, and the District of Columbia, requiring load-serving entities to meet a certain percentage of their load with RPS-eligible facilities, or buy RECs from such facilities.[97] PJM stated that, cumulatively, these programs have provided, or will provide, subsidies to thousands of MWs of PJM capacity and that similar programs are likely to be implemented in other PJM states.[98]

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[94] On the basis of the record in this proceeding, the December 2019 Order applies the MOPR to renewable and self-supply resources differently than the Commission recently determined in NYISO. *See N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (2020). The NYISO order addressed NYISO's compliance with a 2015 order, which predated the December 2019 Order by over four years. Moreover, the Commission has explained that "regional markets are not required to have the same rules. Our determination about what rules may be just and reasonable for a particular market depends on the relevant facts." December 2019 Order, 169 FERC ¶ 61,239 at P 204 n.431.

[95] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 15 & n.21 (citations omitted).

[96] *Id.* P 130.

[97] *Id.* P 131.

[98] *Id.* P 131 & n.254 (citing PJM 2018 April Filing at 26-27, Attach. F (Affidavit of Dr. Anthony Giacomoni at 9-10, attach. 1) (showing both the current and projected increases in the quantity of RPS resources)).

37. The December 2019 Order reiterated how the record in this proceeding indicates that State Subsidies for both existing and new resources are increasing, especially out-of-market state support for renewable and nuclear resources,[99] and noted how states had also passed legislation subsidizing resources after the June 2018 Order.[100]

38. Having established that the record reveals the increase in State Subsidies in PJM, the Commission explained that State Subsidies are problematic because they suppress capacity prices in the PJM market, and explained how the expanded MOPR was designed to address this problem.[101] We reiterate that State-Subsidized Resources need less revenue from the capacity market than they otherwise would, and the rational choice for such resources is to reduce their offers commensurately to ensure they clear the market. Thus, State Subsidies permit a resource to offer below its costs, distorting the clearing price, which investors and resources rely on in order to plan entry and exit.[102]

39. The December 2019 Order is grounded both on record evidence of increasing out-of-market support and economic theory concerning the effect of that support on prices, meeting the substantial evidence standard.[103] Courts have affirmed the Commission's ability to make judgments based on economic theory, provided the Commission "applie[s] the relevant economic principles in a reasonable manner and adequately explain[s] its reasoning."[104] As the U.S. Court of the Appeals for the District of

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[99] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 37-38 & n.85 (citing June 2018 Order, 163 FERC ¶ 61,236 at PP 151-155; Calpine Initial Comments at 3).

[100] *Id*. P 38 & n.85; s*ee also id.* P 22 & n.55 (listing new state legislation enacted since the June 2018 Order to subsidize new or existing resources).

[101] December 2019 Order, 169 FERC ¶ 61,239 at PP 37-38.

[102] *See* June 2018 Order, 163 FERC ¶ 61,236 at PP 150-156; June 2018 Rehearing Order, at PP 27-29.

[103] Substantial evidence is "more than a scintilla, but can be satisfied by something less than a preponderance of the evidence." *Fla. Mun. Power Agency v. FERC*, 315 F.3d 362, 365 (D.C. Cir. 2003) (quoting *FPL Energy Me. Hydro LLC v. FERC*, 287 F.3d 1151, 1160 (D.C. Cir. 2002). "Substantial evidence 'is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."' *S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41, 54 (D.C. Cir. 2014) (quoting *Murray Energy Corp. v. FERC*, 629 F.3d 231, 235 (D.C. Cir. 2011)).

[104] *Cent. Hudson Gas & Elec. Corp. v. FERC*, 783 F.3d 92, 109 (2d Cir. 2015); *see, e.g.*, *NextEra Energy Res., LLC v. FERC*, 898 F.3d 14, 23 (D.C. Cir. 2018) (dismissing argument that the Commission did not quantify price suppression resulting from MOPR exemption, deferring to Commission's predictive judgment); *Sacramento*

Columbia Circuit has stated, "[p]rice suppression is not a scientific determination, but rather an economic construct" and the Commission may "base its market predictions on basic economic theory" as long as it "explained and applied the relevant economic principles in a reasonable manner."[105] The court has also recognized that the requirement for the Commission to support its findings with substantial evidence "does not necessarily mean empirical evidence."[106] And, courts typically defer to the Commission's reasoning when the Commission relies on substantial evidence to make "a predictive judgment in an area in which it has expertise, such as power markets."[107] Thus, we disagree that the Commission is required to show that each out-of-market payment directly suppresses capacity prices by a particular amount before finding that State-Subsidized Resources can suppress PJM capacity market prices and then addressing that problem.

40. Nor does evidence regarding the current status of the market – including evidence of new generation in development, current strong reserve margins and new entry – call into question the Commission's finding that State Subsidies distort capacity market signals. As explained in the June 2018 Rehearing Order, PJM's capacity market is forward looking, so the current status of the market is not dispositive.[108] Moreover, the evidence cited by parties seeking rehearing does not demonstrate whether additional new entry is being deterred by out-of-market subsidies that allow less economic resources to enter or remain in the market while simultaneously suppressing the prices paid to competitive resources.

41. Regardless of the purpose of the State Subsidy, it can still have the effect of keeping uneconomic resources in operation, or supporting uneconomic entry of new

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*Mun. Util. Dist. v. FERC*, 616 F.3d 520, 531 (D.C. Cir. 2010) (Commission may make findings "based on generic factual predictions derived from economic theory").

[105] *NextEra*, 898 F.3d at 23 (internal quotations and citations omitted).

[106] *S.C. Pub. Serv. Auth.*, 762 F.3d at 65, 76 ("[A]t least in circumstances where it would be difficult or even impossible to marshal empirical evidence, the Commission is free to act based on reasonable predictions rooted in basic economic principles.").

[107] *Wis. Pub. Power Inc. v. FERC*, 493 F.3d 239, 260-61 (D.C. Cir. 2007) ("It is well-established that an 'agency's predictive judgments about areas that are within the agency's field of discretion and expertise are entitled to *particularly deferential review*, as long as they are reasonable.'") (quoting *Earthlink, Inc. v. FCC*, 462 F.3d 1, 12 (D.C. Cir. 2006)) (emphasis in original).

[108] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 34-36.

resources,[109] requiring mitigation under the expanded MOPR to produce just and reasonable capacity market outcomes. Exelon's argument that the December 2019 Order did not sufficiently consider environmental externalities in establishing a replacement rate is fundamentally mistaken.[110] The Commission is a "creature of statute, having no constitutional or common law existence or authority, but *only* those authorities conferred upon it by Congress."[111] The Commission's express statutory authority to set just and reasonable rates does not require consideration of the climate or other externalities of particular resources. Exelon cites no precedent, and we are aware of none, interpreting FPA section 206 as requiring the Commission to consider environmental externalities. When acting under FPA sections 205 and 206, the Commission operates as an economic regulator, not an environmental regulator.[112] The Commission does not regulate environmental externalities except where that authority is conferred in a statute it administers.[113] Moreover, Exelon offers no limiting principle for its argument that economic regulation must include environmental externalities, or any other externality that could be conceived. The Commission, like all other federal agencies, has a general duty under the National Environmental Protection Act (NEPA) to evaluate environmental impacts caused by "major Federal actions significantly affecting the quality of the human

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[109] *See* June Order, 163 FERC ¶ 61,236 PP 150, 155; June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 46.

[110] Exelon Rehearing and Clarification Request at 16-19.

[111] *Atl. City Elec. Co. v. FERC*, 295 F.3d 1, 8 (D.C. Cir. 2002) (quoting *Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001) (internal quotation marks omitted).

[112] *See NAACP v. FPC*, 425 U.S. 662, 669-70 (1(76) (*NAACP*) ("Thus, in order to give content and meaning to the words 'public interest' as used in the Power and Gas Acts, it is necessary to look to the purposes for which the Acts were adopted. In the case of the Power and Gas Acts it is clear that the principal purpose of those Acts was to encourage the orderly development of plentiful supplies of electricity and natural gas at reasonable prices.").

[113] *See, e.g.*, *id.* at 670 n.6 (citing, *inter alia*, 16 U.S.C. § 803(a)(1) (directing the Commission to evaluate what hydroelectric projects "in the judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including irrigation, flood control, water supply, and recreational and other purposes referred to in [16 U.S.C. § 797(e)]").

environment."[114] However, this is a ratemaking proceeding under FPA section 206 and the Commission's orders in rate cases under FPA sections 205 and 206 are categorically exempt from that requirement.[115] The record in this case does not provide any basis for disregarding that longstanding categorical exemption.[116]

42. Clean Energy Associations argue that the December 2019 Order's finding that resources receiving out-of-market support are able to suppress prices is unsupported by

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[114] 42 U.S.C. § 4332(2)(C); *accord, e.g.*, *Sierra Club v. FERC*, 867 F.3d 1357, 1364 (D.C. Cir. 2017).

[115] *See* 18 C.F.R. § 380.4(a)(15) (exempting, *inter alia*, "[e]lectric rate filings submitted by public utilities under sections 205 and 206 of the Federal Power Act" and "the establishment of just and reasonable rates"); *Regulations Implementing National Environmental Policy Act of 1969*, Order No. 486, FERC Stats. & Regs. ¶ 30,783 (cross-referenced at 41 FERC ¶ 61,284), *order on reh'g*, Order No. 486-A, FERC Stats. & Regs. ¶ 30,799 (1988) (cross-referenced at 42 FERC ¶ 61,301).

[116] *See Grand Council of Crees v. FERC*, 198 F.3d 950, 959 (D.C. Cir. 2000) ("Because § 102(2)(C) does not impose any additional substantive requirements on FERC, [it] merely serves to ensure that FERC consider those environmental concerns that it is already authorized to consider . . . . Because we have decided that the Commission properly does not consider environmental concerns in the exercise of its ratemaking authority under FPA § 205, NEPA's procedural requirements (if they even apply to FERC's ratemaking decisions, which we do not decide) do not further petitioners' environmental interests in this instance."); *cf. Town of Norwood v. FERC*, 202 F.3d 392, 407 (1st Cir. 2000) ("FERC's own regulations, made in conformity with the governing regulations under NEPA, categorically classify such transfers of ownership and licensing as the kind of projects not likely to have a significant environmental impact or to require a NEPA environmental impact statement or smaller scale assessment.") (footnote omitted) (citing 18 C.F.R. § 380.4(a)(8), (16)); *Ne. Utils. Serv. Co. v. FERC*, 993 F.2d 937, 958 (1st Cir. 1993) (finding that is authorized to "create categorical exclusions" under NEPA, including the exclusion of "actions under sections 4(b), 203, 204, 301, 304, and 305 of the Federal Power Act" found in 18 C.F.R. § 380.4(a)(16), and further finding that the Commission "need not issue a 'finding of no significant impact' in cases concerning matters that fall into a categorical exclusion"). *See generally* James J. Hoecker, *The NEPA Mandate and Federal Regulation of the Natural Gas Industry*, 13 Energy L.J. 265, 270 & nn.25-29 (1992) ("[C]ourts understand that NEPA did not represent a limitless federal commitment to the study and protection of the environment. . . . NEPA entails neither alterations to the primary missions and obligations of federal agencies, nor expansion of their respective jurisdictions.").

precedent.[117] However, the Commission did not rely solely, or even primarily, on precedent to support this finding. Rather, the Commission relied on evidence that out-of-market support for resources not covered under PJM's then-existing Tariff is increasing[118] and the well-established economic principle that out-of-market support permits subsidized resources to offer below their costs and to suppress the price paid to other resources.[119] We also reject ELCON's argument that the Commission's action lacked basis because PJM's analysis of MOPR-Ex is not sufficient evidence to justify the replacement rate. That argument is a *non sequitur*. The Commission did not adopt MOPR-Ex as the replacement rate; thus, while the MOPR-Ex framework operated as a rough framework for the replacement rate, the December 2019 Order plainly did not rely solely on PJM's analysis of MOPR-Ex to set a different replacement rate.

43. We also reject arguments that the expanded MOPR will somehow set prices above a competitive level.[120] The risk that the expanded MOPR will result in prices that are above a competitive level is misplaced, as the default offer price floors are set at a competitive level and the replacement rate includes an exemption for competitive resources, as well as State-Subsidized Resources that can justify a lower competitive offer (Unit-Specific Exemption). For these reasons, the expanded MOPR will help ensure the use of competitive offers in the auction.

44. We do not agree that the expanded MOPR, which is designed to prevent distortion of the market by State-Subsidized Resources, will increase the risk of competitive market participants exercising supplier-side market power. As the December 2019 Order found, this concern is speculative and not supported in the record.[121] First, the Illinois Attorney General is mistaken in suggesting that any price increase resulting from prohibiting State-Subsidized Resources from offering below their costs would constitute an exercise of market power. Any such price increase would be the result of competitive pricing.

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[117] Clean Energy Associations Rehearing and Clarification Request at 31 (citing 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at P 15).

[118] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 37-38; June 2018 Order, 163 FERC ¶ 61,236 at PP 151-155 (discussing evidence of subsidies to existing nuclear resources and renewable resources); *see also* Calpine Initial Comments at 3. States also continued to pass legislation subsidizing resources after the June 2018 Order. December 2019 Order, 169 FERC ¶ 61,239 at P 22 n.55.

[119] *See* June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 25-27.

[120] OPSI Rehearing and Clarification Request at 6; ELCON Rehearing Request at 4-5.

[121] *See* December 2019 Order, 169 FERC ¶ 61,239 at P 40.

Further, the Tariff already has existing provisions to address supplier-side market power, and the Illinois Attorney General has not demonstrated why the expansion of the existing MOPR renders such provisions ineffective. Therefore, we continue to find that the expanded MOPR is just and reasonable.[122]

45. We also reject Clean Energy Associations' argument that the Commission imposed buyer-side market power mitigation in the absence of anticompetitive concerns which could hamper low offers that are competitive and reflect low costs.[123] First, the expanded MOPR does not focus on buyer-side market power mitigation, but rather addresses the impact of State Subsidies on the market. The December 2019 Order left the existing MOPR in place to address buyer-side market power.[124] Therefore we disagree with Clean Energy Associations that the December 2019 Order applies buyer-side market power mitigation. Second, the expanded MOPR addresses a specific anticompetitive concern – below cost offers as a result of State Subsidies. The expanded MOPR requires that State-Subsidized Resources, which have the ability to offer below their costs because they receive or are entitled to receive State Subsidies, either offer at or above the default offer price floor or justify a lower offer through the Unit-Specific Exemption. The expanded MOPR therefore both addresses an identified anticompetitive concern – the fact that State-Subsidized Resources are able to offer into the capacity market below their actual costs – and ensures that offers reflect costs.

46. Further, we reject Illinois Attorney General's argument that the Commission ignored evidence that clearing prices increased in the ComEd LDA after passage of the Illinois ZEC legislation. Prices are a result of a myriad of factors and the record does not demonstrate a causal link between increased prices in the ComEd LDA and the provision of State Subsidies to certain generators.[125] We clarify that the December 2019 Order

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[122] Moreover, the effect of a State-Subsidized Resource being able to offer below its actual unsubsidized costs can have the same effect as predatory pricing where otherwise competitive resources are forced out of the market by below market competitors.

[123] Clean Energy Associations Rehearing Request at 21-22 & n.98 (citing Exelon Protest, Willig Declaration, Docket No. ER18-1314-000, at P 24 (May 7, 2018)).

[124] December 2019 Order, 169 FERC ¶ 61,239 at P 42.

[125] *See* June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 36 (explaining that Illinois failed to show "what the clearing price in the ComEd LDA would have been without the subsidy or demonstrate that the price was not suppressed" and further explaining "price differentials among auctions do not disprove" the Commission's finding "that subsidized resources would offer below their costs, all other things being equal").

stated only that Ohio House Bill No. 6 and the Ohio Clean Air program were examples of states expanding State Subsidies. The December 2019 Order did not find, as the Ohio Commission suggests, that the specific legislation would increase the total amount of State Subsidies available in Ohio.[126]

### 3. Resources Subject to the Expanded MOPR

#### a. Requests for Rehearing and Clarification

47. Parties contend that the December 2019 Order failed to show that certain resources subject to the expanded MOPR, like seasonal, energy efficiency, energy storage, demand response, and emerging technology resources, suppress prices and threaten capacity market competitiveness, and argue that such resources should thus be exempt.[127] Advanced Energy Entities assert that the June 2018 Order was based on evidence regarding support for only nuclear, solar, and wind resources, and therefore the Commission has not justified expanding the MOPR to other resource types, like demand response, energy efficiency, energy storage and emerging technologies, and thus did not meet its burden under section 206 to demonstrate that the pre-existing Tariff is unjust and unreasonable with regard to these resource types.[128] Advanced Energy Entities complain that the December 2019 Order did not point to any state laws providing support these resources or any evidence that these resources suppress capacity prices.[129] The Maryland Commission requests the Commission reconsider exempting limited amounts of emerging technology, as proposed in its paper hearing comments, because the Commission did not provide justification for why emerging technologies should be subject to the MOPR.[130] Advanced Energy Entities also contend that the Commission

[126] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 8, 23 n.55.

[127] Maryland Commission Rehearing and Clarification Request at 10; West Virginia Commission Rehearing Request at 2; Advanced Energy Entities Rehearing and Clarification Request at 4-19; Exelon Rehearing and Clarification Request at 10-18; EKPC Rehearing and Clarification Request at 17-18, 21; NRECA/EKPC Clarification and Rehearing Request at 60-61 (with respect specifically to electric cooperative demand response); Consumer Representatives Rehearing and Clarification Request at 31; Clean Energy Associations Rehearing and Clarification Request at 29.

[128] Advanced Energy Entities Rehearing and Clarification Request at 4-19 (citing June 2018 Order, 169 FERC ¶ 61,236 at PP 150-153).

[129] *Id*. at 8-10.

[130] Maryland Commission Rehearing and Clarification Request at 5, 22.

failed to address concerns that seasonal resources do not cause unjust and unreasonable price suppression because they are categorically economic.[131]

48. PJM argues the December 2019 Order is not adequately reasoned in rejecting PJM's proposed exemption for facilities whose primary purpose is not power generation because these resources have limited penetration, significantly complicated cost calculations for power generation, and are not vehicles used for price suppression.[132]

49. The Ohio Commission argues that it is unduly discriminatory and arbitrary and capricious that the Commission did not consider a screening process to evaluate whether a state-supported resource is actually causing an unjust and unreasonable end result, and therefore imposes a disadvantage on certain resources relative to others without demonstrating they cause harm.[133] The Illinois Commission states that focusing on the ability to suppress price is illogical and will result in counter-productive outcomes by disqualifying resources—with low costs unrelated to state policy—from clearing in capacity auctions, thereby reducing efficient competition and unjustly and unreasonably raising costs to consumers.[134]

50. DC Attorney General states that, while the Commission can send resource-neutral capacity-related price signals, the December 2019 Order is not resource neutral in its target and its effects.[135] DC Attorney General argues the Commission should not use the capacity market to send resource-specific price signals regarding which type of resource should continue to operate and whether a resource should come online. Clean Energy Associations assert that the December 2019 Order improperly limits competition for capacity by excluding resources from receiving capacity revenues.[136]

51. Consumer Representatives argue that extending the MOPR to existing resources constitutes retroactive ratemaking because states and resource owners that do not qualify for an exemption did not have advance notice that the December 2019 Order would impose the MOPR on these resources and abandon the proposed resource-specific Fixed

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[131] Advanced Energy Entities Rehearing and Clarification Request at 12-15.

[132] PJM Rehearing and Clarification Request at 16; *see also* Advanced Energy Entities Rehearing and Clarification Request at 10-12.

[133] Ohio Commission Rehearing Request at 15.

[134] Illinois Commission Rehearing Request at 14.

[135] DC Attorney General Rehearing Request at 13 & n.47.

[136] Clean Energy Associations Rehearing and Clarification Request at 23.

Resource Requirement (FRR) Alternative.[137] Consumer Representatives state that the final replacement rules will not be accepted until the Commission accepts PJM's compliance filing.[138] By subjecting existing State-Subsidized Resources to the expanded MOPR, Consumer Representatives contend the December 2019 Order establishes a new ratemaking scheme for existing resources that made decisions based on existing state policy under the assumption that the Commission would permit the resource-specific FRR Alternative.[139]

52. The Market Monitor requests clarification as to whether resources that are not subject to the Capacity Performance must-offer requirement will be treated as new resources if they skip auctions.[140] Similarly, Consumer Representatives request that the Commission direct PJM to establish rules that do not require renewable resources to offer in back-to-back auctions because such resources are not subject to the must-offer requirement and therefore do not raise market power concerns.[141]

53. The Market Monitor requests clarification that price responsive demand would be subject to the expanded MOPR if it receives or is entitled to receive a State Subsidy.[142] The Maryland Commission responds that price responsive demand response is not a capacity resource and does not compete or offer to supply capacity in the capacity auction, rather price responsive demand response operates "as price-sensitive demand in the energy market."[143] The Maryland Commission states that load-serving entities participating in price responsive demand response receive reduced energy bills and capacity service bill credits.[144]

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[137] Consumer Representatives Rehearing and Clarification Request at 16-19.

[138] *Id*. at 17.

[139] *Id*. at 19.

[140] Market Monitor First Clarification Request at 5.

[141] Consumer Representatives Rehearing and Clarification Request at 46.

[142] Market Monitor Second Clarification Request at 2.

[143] Maryland Commission Answer at 2-3 (citing *PJM Interconnection, L.L.C.*, 167 FERC ¶ 61,268, at P 4 (2019)).

[144] *Id*.

**b. Commission Determination**

54. We affirm our finding in the December 2019 Order that, in addition to continuing to apply the current MOPR to new natural gas-fired resources, PJM must apply the expanded MOPR (with limited exemptions) to all new and existing, internal and external, State-Subsidized Resources that participate in the capacity market, regardless of resource type.[145] Parties contend that the Commission did not cite evidence supporting expanding the MOPR to seasonal, energy efficiency, energy storage, emerging technologies, and demand response resources, for example, and thus the Commission did not meet its FPA section 206 burden to find the pre-existing Tariff unjust and unreasonable with regard to these resource types. However, the Commission explained that when these resources receive a State Subsidy, such resources have the same ability as other State-Subsidized Resources to suppress capacity market prices, and we see no reasonable basis in this record to distinguish them on this point.[146] The Commission can rely on economic theory to draw logical conclusions.[147] Regardless of the type of technology used, the resource still has the ability to distort capacity prices if it receives or is entitled to receive a State Subsidy. Moreover, as we pointed out in the December 2019 Order, these resources, like any other resource subject to the expanded MOPR as a result of State Subsidies, are free to seek a Unit-Specific or Competitive Exemption if they wish to offer lower than the resource-specific default offer price floors. Contrary to Advanced Energy Entities' argument that the Commission did not explain why seasonal resources should be mitigated, the December 2019 Order responded to their arguments that seasonal resources are "economic."[148]

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[145] December 2019 Order, 169 FERC ¶ 61,239 at P 50 & n.17 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 158).

[146] *Id*. PP 52-54.

[147] *See NextEra*, 898 F.3d at 23; *Sacramento Mun. Util. Dist.*, 616 F.3d at 531 (Commission may make findings "based on generic factual predictions derived from economic theory"). The June 2018 Order cited support for nuclear and renewable resources as evidence that out-of-market support is growing, not as an exclusive list of subsidies or resources that warrant mitigation. The economic theory underpinning the June 2018 Order is that out-of-market support causes price suppression, regardless of the resource type. December 2019 Order, 169 FERC ¶ 61,239 at PP 51, 54; *see also* June 2018 Order, 163 FERC ¶ 61,236 at PP 150, 155, 156; June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 25-28 (discussing the economic theory that out-of-market support causes price suppression and dismissing arguments that the Commission is required to demonstrate that subsidized resources actually suppress clearing prices).

[148] December 2019 Order, 169 FERC ¶ 61,239 at P 53.

55. In response to PJM, we continue to find that it is just and reasonable not to distinguish capacity resources[149] based on whether their primary purpose is electricity production.[150] Even State-Subsidized Resources with limited penetration, have the ability to suppress capacity prices in a single price auction construct, regardless of whether these resources are intended to be instruments of price suppression.[151]

56. We continue to conclude that it is reasonable to subject all State-Subsidized Resources to the expanded MOPR, rather than evaluate, on a case-by-case basis, whether each offer is likely to impact clearing prices.[152] Because all resources that receive subsidies have the ability to suppress the price paid to unsubsidized resources, a case-by-case analysis would be unnecessarily complicated and burdensome. The Illinois Commission asserts that the expanded MOPR will disqualify resources with low costs unrelated to state policies from clearing in capacity auctions, thereby reducing efficient competition and unjustly and unreasonably raising costs to consumers.[153] However, if a resource truly has low costs regardless of any State Subsidies, it can seek a Unit-Specific Exemption. The replacement rate does not bar resources from participating in the capacity market, but rather requires State-Subsidized Resources to demonstrate that they are, in fact, competitive, independent of the State Subsidy.

57. We disagree with DC Attorney General's contention that the December 2019 Order does not adhere to our bedrock principle of resource neutrality.[154] States, not the Commission, determine which resources obtain out-of-market support. The replacement rate's definition of State Subsidy is neutral and not limited to any specific type of

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[149] Capacity resource, as used in this order, means all resource types that seek to participate in PJM's capacity market, including seasonal resources. December 19 Order, 169 FERC ¶ 61,239 at P 51.

[150] PJM Rehearing and Clarification Request at 16; Advanced Energy Entities Rehearing and Clarification Request at 10-12.

[151] December 2019 Order, 169 FERC ¶ 61,239 at P 51.

[152] *See id*. PP 72, 98-99.

[153] Illinois Commission Rehearing Request at 14; *see also* Ohio Commission Rehearing Request at 15.

[154] *See* DC Attorney General Rehearing Request at 13-14 (citing *ISO New England, Inc*., 162 FERC ¶ 61,205, at P 26 (2018) (capacity market rules evaluated as resource-neutral) (CASPR Order)).

resource that receives a State Subsidy.[155] The Commission explained, "[t]he type of resource is immaterial if the resource receives a State Subsidy and thus has the ability to suppress capacity prices."[156] Moreover, while the pre-existing MOPR only applied to new natural gas-fired resources, the expanded MOPR, with limited exemptions, applies to all new and existing resources that receive or, are entitled to receive, a State Subsidy regardless of resource type.[157] Recognizing that State-Subsidized Resources, regardless of resource type and intent, can suppress or otherwise distort market prices, the expanded MOPR not only adheres to, but also enhances, resource neutrality.

58. Contrary to Clean Energy Associations' assertion that the December 2019 Order improperly limits competition for capacity by excluding resources from receiving capacity revenues,[158] we find the expanded MOPR will enhance competition by ensuring that capacity market offers are competitive.[159] We reiterate that the replacement rate does not bar competitive resources from participating in the capacity market or receiving capacity revenues.

59. With regard to Consumer Representatives' argument that the December 2019 Order violates the rule against retroactive ratemaking, we fail to see how this is the case. The rule against retroactive ratemaking provides that the Commission, or utilities, may not adjust current rates to make up for past errors or rates later found unjust and unreasonable.[160] In this order, the Commission has not made the replacement rate effective retroactively, but the Commission will set the effective date for the replacement rate when it acts on the compliance filing and fixes the just and reasonable replacement rate pursuant to FPA section 206.[161] To the extent Consumer Representatives argue that

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[155] December 2019 Order, 169 FERC ¶ 61,239 at P 67.

[156] *Id*. P 51.

[157] *Id*. P 37.

[158] Clean Energy Associations Rehearing and Clarification Request at 23.

[159] December 2019 Order, 169 FERC ¶ 61,239 at P 5 (stating the replacement rate concentrates on the "core problem presented in the Calpine complaint and in PJM April 2018 rate proposal—that is, the manner in which subsidized resources distort prices in a capacity market that relies on competitive auctions to set just and reasonable rates").

[160] *Town of Norwood v. FERC*, 53 F.3d 377, 381 (D.C. Cir. 1995).

[161] December 2019 Order, 169 FERC ¶ 61,239 at P 3; *Verso Corp. v. FERC*, 898 F.3d 1, 11 (D.C. Cir. 2018) ("Section 206(a) authorizes FERC to 'fix' rates prospectively, after it concludes that a rate is inappropriate upon a complaint by a market participant or on FERC's own impetus."). The refund effective date under FPA section 206 operates

they were deprived of notice that certain existing resources would be mitigated and not able to elect the proposed resource-specific FRR Alternative, we disagree that a mere proposal by the Commission later requires the Commission to implement the proposal to avoid a due process violation.[162]

60. In response to the Market Monitor's clarification requests, we clarify that resources that are not subject to the Capacity Performance must-offer requirement will be treated as new resources if they seek to re-enter the capacity market after choosing not to participate in a particular auction, including intermittent renewable resources. We reiterate, as we found in the December 2019 Order, resources not subject to the Capacity Performance must-offer requirement seeking to re-enter the capacity market for any reason will be treated as new, consistent with the treatment of repowered resources.[163] After the next BRA, any resource seeking to re-enter the capacity market will be treated as new, regardless of whether it is subject to the must-offer requirement.

61. We reject Consumer Representatives' request to establish rules that do not require renewable resources to offer in back-to-back auctions. The December 2019 Order did not change the must-offer requirement; resources not subject to that requirement may still skip auctions, but they will face the appropriate mitigation.

62. Finally, we clarify that price responsive demand resources do not participate in the capacity market as supply and thus are not subject to the MOPR.

### 4. Definition of State Subsidy

#### a. Requests for Rehearing and Clarification

63. Parties assert that the Commission's definition of State Subsidy is vague and overly-broad, providing no guidance to PJM in discerning which state policies may trigger the expanded MOPR, and implicating programs that are beyond the Commission's

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differently: the refund effective date is set no earlier than the date a complaint is made to the Commission or initiated by the Commission *sua sponte*, and it is set no later than five months after a complaint is made to the Commission or initiated by the Commission *sua sponte*. *See* 16 U.S.C. § 824e(b).

[162] *See infra* Section IV.G.1 at P 352 (addressing arguments that the Commission did not violate notice requirements in declining to implement the resource-specific FRR Alternative).

[163] December 2019 Order, 169 FERC ¶ 61,239 at P 209.

jurisdiction.[164] Clean Energy Advocates assert that the lack of clarity and vagueness in the definition have the effect of unconstitutionally delegating the Commission's authority to PJM and the Market Monitor, asserting that the ambiguous definition will create perpetual uncertainty and litigation.[165] Clean Energy Associations argue that the definition of State Subsidy creates a new dual burden whereby PJM must classify subsidies and then resources must attempt to justify their offers, defying Commission precedent allowing resources to offer at or below their marginal costs.[166]

64. Clean Energy Associations argue that the December 2019 Order does not address how PJM will determine which resources are entitled to a State Subsidy or how such determinations would be reviewed and considered,[167] which means that PJM and the Market Monitor will be tasked with becoming the "subsidy police," evaluating myriad

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[164] New Jersey Board Rehearing and Clarification Request at 25; Dominion Rehearing and Clarification Request at 8, 17; Clean Energy Associations Rehearing and Clarification Request at 14 (such as local land use); AEP/Duke Rehearing and Clarification Request at 3 & n.3; AEP/Duke Rehearing and Clarification Request at 5-10; DC Attorney General Rehearing Request at 1, 6, 9; Illinois Commission Rehearing Request at 20-21; Advanced Energy Entities Rehearing and Clarification Request at 3; OPSI Rehearing and Clarification Request at 5; Clean Energy Advocates Rehearing Request at 37-38; Consumers Coalition Rehearing Request at 42; ELCON Rehearing Request at 3, 9.

[165] Clean Energy Advocates Rehearing Request at 38, 40; *see also* Dominion Rehearing and Clarification Request at 17-18.

[166] Clean Energy Associations Rehearing and Clarification Request at 23-24 (citing *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1004 (D.C. Cir. 1990) ("In a competitive market, where neither buyer nor seller has significant market power, it is rational to assume that the terms of their voluntary exchange are reasonable, and specifically to infer that the price is close to marginal cost, such that the seller makes only a normal return on its investment."); *ISO New England Inc.*, 158 FERC ¶ 61,138, at P 36 (2017) (allowing bidding below marginal costs, and emphasizing that resources bidding below marginal cost will experience the same "downside risk," which "acts as a disincentive for such offering behavior") [sic]; *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs.*, 142 FERC ¶ 63,011, at P 95 (2013) ("As discussed in our prior orders, our mitigation plan is intended to replicate the price that would be paid in a competitive market, in which sellers have the incentive to bid their marginal costs.")).

[167] *Id*. at 26.

state programs, an administratively burdensome process.[168] Given the use of "or" in the definition, Consumers Coalition argue it is unclear if all four prongs of the definition must be met to qualify as a State Subsidy.[169]

65. Parties argue that the replacement rate is arbitrary and capricious because the Commission has not demonstrated that the State Subsidy definition targets policies that actually result in price suppression or allow a resource to enter and remain in the market when it otherwise would not have.[170] This is important, parties contend, because the Commission may only regulate subsidies that have a material effect on wholesale rates. Clean Energy Associations assert that the State Subsidy definition is directly contrary to the Supreme Court's ruling in *EPSA*, where the court acknowledged that "if indirect or tangential impacts on wholesale electricity rates" were sufficient to trigger the Commission's jurisdiction, "[the Commission] could regulate now in one industry, now in another, changing a vast array of rules and practices to implement its vision of reasonableness and justice."[171]

66. Parties argue that the definition of State Subsidies exceeds the scope necessary to address the Commission's alleged concerns of price suppression in the capacity market,[172] resulting in over-mitigation, a harm the December 2019 Order failed to consider.[173] Noting that the Commission's jurisdiction does not have infinite breadth, parties contend that the State Subsidy definition includes "indirect" support or support that "could have the effect of allowing a resource to clear," which could include any

[168] Clean Energy Associations Rehearing and Clarification Request at 26-27; Dominion Rehearing and Clarification Request at 17-18.

[169] Consumers Coalition Rehearing Request at 43.

[170] *See, e.g.*, Clean Energy Advocates Rehearing Request at 44, Illinois Commission Rehearing Request at 20-21; Dominion and Clarification Rehearing Request at 8-9; *see also* Ohio Commission Rehearing Request at 5 (mitigating state actions that may be just and reasonable based on the broader public interest is unduly discriminatory).

[171] Clean Energy Associations Rehearing and Clarification Request at 14-15 (citing *EPSA*, 136 S. Ct. at 774).

[172] OPSI Rehearing and Clarification Request at 5; Illinois Rehearing Request at 20-21.

[173] Clean Energy Advocates Rehearing Request at 38; Consumers Coalition Rehearing Request at 44-47.

number of state programs.[174] Dominion requests that the Commission revise the definition of State Subsidy to include only those state-sponsored programs that provide direct financial benefits to the generation resource, such that those resources might be prompted to lower their offer price in a way that correlates to the subsidy, noting these are the subsidies likely to significantly affect the market.[175] The Illinois Commission states that the definition must be narrowly designed to address legally impermissible effects of seller offers on suppressing clearing prices.[176]

67. Challenging the December 2019 Order's reasoning, parties argue that the Commission has not shown that the State Subsidy definition is limited to state policies that directly affect capacity market prices.[177] Clean Energy Associations argue that, by defining a State Subsidy so broadly as to include "direct or indirect" benefits, those that "could" result in a resource clearing PJM's capacity market, and ignoring the operational connection between a state subsidy and the wholesale market's operation, the Commission has "crossed the jurisdictional divide" and exceeded its authority.[178]

68. Parties further challenge the December 2019 Order's reasoning that the definition includes subsidies that are "most nearly directed at, or tethered to, new entry or continued

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[174] DC Attorney General Rehearing Request at 10, 16 & n.58 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 67); *see also* Illinois Commission Rehearing Request at 19-20; OPSI Rehearing and Clarification Request at 5.

[175] Dominion Rehearing and Clarification Request at 18; *see also* ELCON Rehearing Request at 9 (requesting a strict definition of State Subsidy limited to only those subsidies that fundamentally compromise the market).

[176] Illinois Commission Rehearing Request at 21.

[177] *See, e.g.*, Clean Energy Associations Rehearing and Clarification Request at 13; *see also* Clean Energy Advocates Rehearing Request at 44 (Commission's claim that it is targeting policies that "squarely" impact the production of electricity or supply-side participation in PJM's capacity market and therefore require corrective action is belied by the breadth of the definition); DC Attorney General Rehearing Request at 15 (asserting the definition "encompasses nearly all state clean energy programs, not just ones that influence the market").

[178] Clean Energy Associations Rehearing and Clarification Request at 13; s*ee also* DC Attorney General Rehearing Request at 16 (noting that a resource is included in the definition if it qualifies for the state program, even if it does not participate in it, or the program merely "*could* have the effect of allowing a resource to clear") (quoting December 2019 Order, 169 FERC ¶ 61,239 at P 67) (emphasis added).

operation of generating capacity" in the capacity market.[179] Parties contend that neither *Oneok* nor *Hughes* support the Commission's determination to apply the MOPR to resources receiving State Subsidies because neither decision refers to state subsidies "nearly" directed at or tethered to Commission-regulated capacity markets.[180] Parties argue this is an all or nothing analysis: either a state law is targeted at the wholesale markets or it is not, and this can be discerned from the state law.[181] Noting the Commission identifies no specific state statute or regulation that is "nearly directed at or tethered to the PJM capacity market," parties object that, instead, with limited exception, the December 2019 Order impermissibly ascribes such intent to any state law that affords a subsidy (or revenue stream) to state-favored resources.[182] Advanced Energy Entities state that unless the Commission can demonstrate that subsidies received by these resources are directed at PJM capacity market participation, the Commission must grant rehearing.[183]

69. Parties further contend that the state programs targeted by the definition of State Subsidy are not designed to influence wholesale market prices and are neither directed at, nor tethered to, the wholesale capacity market, but rather, for example, are designed to promote new and clean generation and economic development.[184] For example, the Ohio Commission points out that House Bill 6 supports industrial and economic retention and growth in the regions that would have been negatively impacted by retiring nuclear

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[179] *See* December 2019 Order, 169 FERC ¶ 61,239 at P 68 (internal quotations omitted); New Jersey Board Rehearing and Clarification Request at 12; AEP/Duke Rehearing and Clarification Request at 5-6; Consumers Coalition Rehearing Request at 17; Ohio Commission Rehearing Request at 21-22; Clean Energy Associations Rehearing and Clarification Request at 15.

[180] Consumers Coalition Rehearing Request at 17-18 (citing *Hughes* and *Oneok*, likewise noting that the "tethering" discussed in *Hughes* was for a state law that conditioned payments based on capacity revenues, which is not at issue with the State Subsidies in the December 2019 Order).

[181] *Id*. at 17.

[182] *Id.* at 18.

[183] Advanced Energy Entities Rehearing and Clarification Request at 11.

[184] New Jersey Board Rehearing and Clarification Request at 12; *see also* West Virginia Commission Rehearing Request at 3; Ohio Commission Rehearing Request at 21; DC Attorney General Rehearing Request at 11-12.

plants.[185] Advanced Energy Entities argue that resources whose primary purpose is not energy production and seasonal resources are not built with the intention of participating in the capacity market, and therefore payments to these resources are not directed at or tethered to the new entry or continued operation of generating capacity.[186] Advanced Energy Entities contend that state laws and policies supporting energy efficiency, energy storage, emerging technologies, and demand response resources are not directed at or tethered to the wholesale markets, but rather to regulate generating resources, reduce emissions, and provide retail services and benefits.[187] Advanced Energy Entities also argue that any out-of-market revenue energy efficiency and demand response resources receive is likely related to providing services distinct from capacity market participation and is therefore not directed at or tethered to PJM's capacity market.[188]

70. DC Attorney General asserts that the Commission cites no evidence to support its claim that subsidies provided under RPS programs nearly "aim at," "target," or are "tethered" to the capacity market. DC Attorney General contends that the price of RECs is set by a competitive market, not tethered to the capacity market, and RPS programs exist to promote green jobs and address environmental externalities.[189] NRECA/EKPC argue that self-supply public power utilities and electric cooperatives should not be considered subsidized because payments received by public power, or the long term supply arrangements entered into by electric cooperatives, are not directed by states, or tethered to particular resources.[190]

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[185] Ohio Commission Rehearing Request at 22.

[186] Advanced Energy Entities Rehearing and Clarification Request at 11.

[187] *Id*. at 9. Advanced Energy Entities contrast the December 2019 Order with the July 2018 Order where the Commission did, according to Advanced Energy Entities, point to record evidence that the Commission claimed showed that nuclear, wind, and solar resources receiving state support cause price suppression. *Id*. at 9 n.19 (citing June 2018 Order, 163 FERC ¶ 61,236 at PP 151-152).

[188] Advanced Energy Entities Rehearing and Clarification Request at 16-17.

[189] DC Attorney General Rehearing Request at 11-12 (citations omitted) (quoting December 2019 Order, 169 FERC ¶ 61,239 at P 68 (quoting *Oneok*, 1135 S. Ct. at 1602 (internal quotation omitted))); *see id*. at 11 & n.36 (citing DC Attorney General Initial Testimony at 4 (filed Oct. 2, 2018); Renewable Energy Portfolio Standards Act of 2004, 52 D.C. Reg. 2285 (Mar. 11, 2005)).

[190] NRECA/EKPC Clarification and Rehearing Request at 27-31.

71. AEP/Duke assert that retail rate riders do not affect existing resources' continued operation or participation in the capacity market or supply-supply side participation in PJM's capacity market.[191] AEP/Duke argue the Commission's finding that the state-approved retail rider related to Ohio Valley Electric Corporation (OVEC) falls within the definition of State Subsidy, and thus OVEC should be subject to the MOPR (unless an exemption applies) is a direct attack on a state-retail ratemaking decision (Ohio's decision to be a retail choice state and use a state-approved retail rider) that has no connection to or impact on whether OVEC continues to operate within PJM.[192]

72. Parties argue that the December 2019 Order erred in defining State Subsidy to include the public power business model.[193] Public Power Entities add that, in securing self-supply resources and recovering the costs from their customers, public power utilities are not engaging in the type of legislatively-directed state support for particular generation resources or technologies that formed the basis for the June 2018 Order's finding that PJM's Tariff was unjust and unreasonable.[194]

73. The Ohio Commission argues that, under the December 2019 Order, a state allowance for stranded cost recovery would be a State Subsidy, but contends this is contrary to Order No. 888, in which the Commission informed states considering retail access that the Commission would provide stranded cost recovery for affected resources if states did not do so.[195]

74. Public Citizen argues the Commission's December 2019 Order draws an arbitrary line between what is and is not a State Subsidy by exempting a host of "externality

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[191] AEP/Duke Rehearing and Clarification Request at 6.

[192] *Id*.

[193] Public Power Entities Rehearing and Clarification Request at 17; NRECA/EKPC Clarification and Rehearing Request at 14-24.

[194] Public Power Entities Rehearing and Clarification Request at 18.

[195] Ohio Commission Rehearing Request at 3 (citing *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Servs. by Pub. Utils. Recovery of Stranded Costs by Pub. Utils. & Transmitting Utils*, Order No. 888, FERC Stats. & Regs. ¶ 31,036 (1996) (cross-referenced at 75 FERC ¶ 61,080), *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 (cross-referenced at 78 FERC ¶ 61,220), *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002)).

payments" from the subsidy definition.[196] Clean Energy Associations and Clean Energy Advocates argue that the Commission offers almost no explanation to justify applying the MOPR only to out-of-market revenue that meets the State Subsidy definition and not to other out-of-market revenues when, under the Commission's own logic, all out-of-market revenues "are capable of suppressing market prices."[197]

75. The New Jersey Board argues that in defining State Subsidy in a way to favor incumbent, largely fossil-fueled generation participating in PJM's capacity market, the December 2019 Order countermands the intent of the Public Utilities Regulatory Policies Act (PURPA), and other federal programs, such as the State Energy Program, which focus on promoting renewable energy.[198] Notwithstanding the Commission's ruling that sales of energy and capacity pursuant to PURPA are not State Subsidies, New Jersey Board argues the December 2019 Order fails to recognize that PURPA resources benefit from state programs, including RECs, and that subjecting these resources to the MOPR creates a tension for resources receiving both types of subsidies or otherwise nullifies federal laws.[199]

### b. <u>Commission Determination</u>

76. We affirm the December 2019 Order's definition of State Subsidy[200] as specifically-tailored and necessary to permit review and mitigation of capacity offers by

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[196] Public Citizen Rehearing Request at 4 (citing December 2019 Order, 169 FERC ¶ 61,239 at 69).

[197] Clean Energy Associations Rehearing and Clarification Request at 39-40; Clean Energy Advocates Rehearing Request at 6.

[198] New Jersey Board Rehearing and Clarification Request at 39-41.

[199] *Id*. at 40-41.

[200] The December 2019 Order defined State Subsidy as "A direct or indirect payment, concession, rebate, subsidy, non-bypassable consumer charge, or other financial benefit that is (1) a result of any action, mandated process, or sponsored process of a state government, a political subdivision or agency of a state, or an electric cooperative formed pursuant to state law, and that (2) is derived from or connected to the procurement of (a) electricity or electric generation capacity sold at wholesale in interstate commerce, or (b) an attribute of the generation process for electricity or electric generation capacity sold at wholesale in interstate commerce, or (3) will support the construction, development, or operation of a new or existing capacity resource, or (4) could have the effect of allowing a resource to clear in any PJM capacity auction." December 2019 Order, 169 FERC ¶ 61,239 at P 67.

resources that receive or are entitled to receive out-of-market revenues that directly affect the capacity market.[201] We agree that the Commission may only regulate where the state policy directly affects wholesale rates,[202] but disagree with parties that the definition of State Subsidy includes state policies that have an indirect or tangential impact on PJM's wholesale capacity market rates. As discussed throughout this proceeding, State Subsidies directly affect the capacity market by keeping existing uneconomic resources in operation or supporting the uneconomic entry of new resources, both of which cause unreasonable price distortions in the PJM capacity market.[203] This definition is not intended to cover every form of state financial assistance that might indirectly affect Commission-jurisdictional rates or transactions; rather, it reaches forms of state assistance that directly affect wholesale capacity market rates.

77. The definition is not overbroad because it concentrates on those forms of out-of-market payments provided or required by certain states, which, even in the absence of facial preemption under the FPA, squarely impact participation in PJM's capacity market.[204] It is unclear which state policies Clean Energy Associations and Clean Energy Advocates argue do not impact the production of electricity and supply-side participation in the capacity market. In any event, as discussed in this proceeding, out-of-market payments to capacity resources impact the production of electricity and supply-side participation in the capacity market by keeping uneconomic resources in operation and supporting uneconomic new entry.[205]

78. Parties' objections to the Commission's citation to *Oneok* and *Hughes* are misplaced. The Commission's citation to *Oneok* and *Hughes* was intended to signal that the Commission's action is constrained and focused on the mitigation of State Subsidies that "are most nearly 'directed at' or tethered to the new entry or continued operation of

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[201] *Id*.

[202] *EPSA*, 136 S. Ct. at 774.

[203] December 2019 Order, 169 FERC ¶ 61,239 at P 68; June 2018 Order, 163 FERC ¶ 61,236 at P 150.

[204] December 2019 Order, 169 FERC ¶ 61,239 at P 68. As to the assertion that the use of "or" makes it unclear, *see* Consumers Coalition Rearing Request at 43, we clarify that all four prongs do not have to be met to satisfy the definition. The definition is met by satisfying (1) and (2); or (1) and (3); or (1) and (4). If any (or more) of these combinations are met, the payment, concession, rebate, subsidy, non-bypassable consumer charge, or other financial benefit is a State Subsidy.

[205] December 2019 Order, 169 FERC ¶ 61,239 at P 68; June 2018 Order, 163 FERC ¶ 61,236 at P 150.

generating capacity in the federally-regulated multi-state wholesale capacity market."[206] *Oneok* and *Hughes* define when a state policy is preempted by federal law; however, the Commission's jurisdiction is not limited to responding to state policies that are already preempted and therefore already infirm. The Commission may, as here, take action to protect the integrity of federally-regulated markets against state policies that directly affect those markets. *Oneok* and *Hughes* do not preclude the Commission from mitigating State Subsidies that directly affect the capacity market clearing price, regardless of intent.[207] If a State Subsidy directly affects the wholesale rate, regardless of intent, the Commission has authority to mitigate the State Subsidy.[208]

79. Parties contend that retail rate riders, self-supply, and subsidies for energy efficiency, demand response, capacity storage, emerging technologies, and resources whose primary purpose is not energy production, do not "squarely impact the production of electricity or supply-side participation in PJM's capacity market by supporting the entry or continued operation of preferred generation resources that may not be able to succeed in the wholesale competitive capacity market."[209] Parties further argue that subsidies to these resources are not "nearly directly at or tethered to the new entry or continued operation of generating capacity" in PJM.[210] However, State Subsidies provided to these resources impact the production of electricity or supply-side participation in the capacity market by permitting subsidized resources to offer below their costs. The resource need not be built for the purpose of participating in the capacity market in order to be able to distort capacity market prices. It is the resource's participation as a supplier in the capacity market that triggers the need to mitigate the effect State Subsidies may have on the resource's capacity supply offer and, consequently, on the price paid to other suppliers.

80. Further, parties misunderstand the December 2019 Order's findings with regard to the "directed at or tethered to" standard. The December 2019 Order did not find that it

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[206] December 2019 Order, 169 FERC ¶ 61,239 at P 68 (footnotes omitted) (quoting *Oneok*, 135 S. Ct. at 1602) (citing *Hughes*, 136 S. Ct. at 1299).

[207] *See supra* P 21 (discussing why the Commission is obligated to ensure just and reasonable wholesale rates).

[208] *See EPSA*, 136 S. Ct. at 774 (finding that the Commission has jurisdiction where rules or practices "*directly* affect the wholesale rate") (emphasis in original) (quoting, and adopting, *Cal. Indep. Sys. Operator Corp. v. FERC*, 372 F.3d 395, 403 (2004)); *Star*, 904 F.3d at 524 (citing the June 2018 Order).

[209] December 2019 Order, 169 FERC ¶ 61,239 at P 68.

[210] *Id*.

would mitigate only State Subsidies that "aim at," "target," or are "tethered" to the capacity market. Rather, the December 2019 Order stated that "our concern is with those forms of State Subsidies that are not federally preempted, but nonetheless are most nearly 'directed at' or tethered to the new entry or continued operation of generating capacity in the federally-regulated multi-state wholesale capacity market administered by PJM."[211] State Subsidies may materially impact a resource's decision to enter or remain in the market regardless of whether those payments are aimed at or tethered to the capacity market.[212] We therefore affirm that State Subsidies provided to any resource offering supply into the PJM capacity market can materially impact a resource's decision to enter or remain in the market.[213] While parties argue that various state programs are not intended to impact the capacity market, both the June 2018 Order and the December 2019 Order found that State Subsidies have the ability to influence capacity market prices, regardless of intent.[214]

81. We also deny rehearing requests arguing that payments received by public power from load are not tethered to particular resources or provided to support the entry or continued operation of preferred generation resources. As discussed in Section D.2.b, public power is directly supporting capacity generation resources by carrying out their business to supply load through supply contracts.[215]

82. Further, as discussed in Section D.6.a.i and D.6.b.i, we disagree with AEP/Duke's contention that retail rate riders do not affect existing resources' continued operation or participation in the capacity market or supply-side participation in the PJM capacity market.[216] As we explained in the December 2019 Order, it is appropriate to include the OVEC retail rate riders within the definition of State Subsidy because the state-approved rate riders pass through the costs, or credits, associated with a wholesale power purchase agreement based on revenues from the PJM capacity market.[217] The retail rate rider

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[211] *Id*. (citations omitted).

[212] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 151.

[213] *Id*.

[214] December 2019 Order, 169 FERC ¶ 61,239 at P 177; June 2018 Order, 163 FERC ¶ 61,236 at PP 155-156 & n.288 (citing 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at PP 170-71).

[215] *See infra* PP 220-222.

[216] *See infra* PP 94-99, 100-IV.B.7.

[217] December 2019 Order, 169 FERC ¶ 61,239 at P 71.

guarantees a level of cost recovery and, as such, is connected to the wholesale procurement or sale of electricity or supports the construction, development, operation of new and existing capacity resources.[218]

83. Parties concerned with the "indirect" language in the State Subsidies definition are taking that word out of context. The Commission is referring to *indirect payments to resources* which result in these resources having the ability to offer into the capacity market at lower prices, thereby directly impacting the wholesale capacity market clearing price by displacing other resources that did not receive this indirect subsidy. An example of an indirect payment is an RPS program. In general, RPS programs require sellers of electricity within a state to satisfy the RPS requirement by: (1) generating from certain generation resources a specified portion of electricity sold to end users; (2) purchasing for resale a sufficient amount of electricity generated from certain generation resources; or (3) purchasing tradeable RECs. Moreover, the proceeds from the sale of RECs provides income that permits participation in the capacity markets at a rate lower than actual cost. The state is responsible for these direct or indirect payments to specified resources because the state established the RPS program that led to these required transactions.

84. We further disagree with parties who argue that inclusion of "could have the effect of allowing a resource to clear" casts too wide a net or that it should not cover all out-of-market payments. The aim of the definition is to identify all State Subsidies that enable resources to offer into the capacity market at prices lower than their true costs, thus allowing those resources to undercut the offers of non-State-Subsidized Resources. Further, Public Citizen and Clean Energy Association assert that the Commission draws arbitrary distinctions by, among other things, excluding some out-of-market revenue, like coal ash and "externality payments," from the definition. It is unclear to which "externality payments" Public Citizen refers. But, the December 2019 Order found that if an out-of-market payment meets the definition of State Subsidy, the State-Subsidized Resource will be subject to the expanded MOPR, regardless of whether that payment is related to an externality.[219] The December 2019 Order explained that the definition focused on those state out-of-market payments that "squarely impact the production of electricity and supply-side participation in PJM's capacity market," and is "not intended to cover every form of state financial assistance that might indirectly affect FERC-jurisdictional rates or transactions; nor is it intended to address other commercial externalities or opportunities that might affect the economics of a particular resource."[220]

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[218] *Id*.

[219] *Id.* P 69.

[220] *Id*. P 68.

85. We also affirm that the definition provides PJM with sufficient guidance to ascertain which state policies are subject to the expanded MOPR. Parties have raised and the Commission has addressed a number of issues related to which types of state policies, processes and programs meet the definition, providing PJM with ample guidance to implement the definition. Indeed, PJM itself has not said it would be unable to use this definition to decide which subsidies are subject to the expanded MOPR. We further disagree with assertions that the definition is an unconstitutional delegation of the Commission's authority to PJM and the Market Monitor. The Commission has prescribed with sufficient clarity what is subject to the expanded MOPR. PJM and the Market Monitor merely will be implementing the Commission's decision, subject to the same compliance and complaint procedures that attend the implementation of any other filed rate or market rule; thus, there is no improper delegation of the Commission's authority.

86. Additionally, we disagree with Clean Energy Association's argument that the definition of State Subsidy conflicts with Commission precedent allowing resources to offer at or below their marginal costs. Nothing in the December 2019 Order prevents a resource that is not receiving a State Subsidy and is therefore not shielded from the downside of that behavior, from offering below their marginal cost. The purpose of the expanded MOPR is to protect the competitiveness of the PJM capacity market by mitigating the impact of State Subsidies, which distort capacity market prices and therefore weaken the capacity market price signal. Under the circumstances, where, as the record here reveals, State Subsidies are increasing, it is reasonable to require both that PJM classify subsidies and that resources justify their offers.

87. Contrary to the New Jersey Board's contention, the Commission has not defined State Subsidy so as to benefit fossil fuel generation over renewable resources. The definition is resource-neutral. Nor does the December 2019 Order's treatment of Qualifying Facilities (QF) undermine PURPA. QF resources maintain the same rights under PURPA, including a guaranteed purchaser of energy and capacity sales at an avoided cost rate, and a right to interconnect.[221] RECs, by contrast, are the product of a state program, not mandated by PURPA.[222] Thus, we do not agree that the replacement rate conflicts with PURPA.

88. In response to the Ohio Commission's arguments, we clarify that while the State Subsidy definition may include payments to effectuate Order No. 888 wholesale stranded cost recovery, such payments are longstanding, Commission-approved payment streams and thus are appropriately exempt from application of the MOPR, similar to longstanding

[221] 16 U.S.C. § 824a-3.

[222] *Am. Ref-Fuel Co.*, 105 FERC ¶ 61,004, at P 23 (2003) (stating that RECs exist outside the confines of PURPA).

self-supply arrangements. Finally, the question of how PJM will determine which resources are entitled to a State Subsidy is premature. Parties can raise these concerns on compliance.

### 5. Receive or Entitled to Receive a State Subsidy

#### a. Requests for Rehearing and Clarification

89. The Ohio Commission requests the Commission grant rehearing and specify that capacity resources that are not eligible to receive and do not receive state out-of-market support in a future delivery year shall not, at the time of the BRA for that delivery year, be subject to the new MOPR.[223]

90. PSEG takes issue with the Commission's language regarding "entitled to," stating that the Commission found that "a capacity resource should be considered to be entitled to receive a State Subsidy if the resource previously received a State Subsidy, and has not cleared a capacity auction since that time."[224] PSEG states that this finding expands PJM's recommendation and maintains that there is no explanation for why a resource that has no legal claim to a subsidy should be mitigated merely because it has previously received a subsidy.[225] PSEG also argues that in expanding the MOPR to resources that "receive or are eligible to receive" States Subsidies, the Commission ignored comments of intervenors who argued that this language would cause over-mitigation because a resource may be eligible for a subsidy, but not guaranteed to receive it.[226] Further, PSEG contends that requests for future revenues do not suppress capacity prices, and resources may receive support for only part of the PJM delivery year for any given auction.[227] PSEG argues that the MOPR should not apply unless a resource is receiving support or has received assurances of support, and only for the duration of time during which the resource is receiving support.[228]

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[223] Ohio Commission Rehearing Request at 26.

[224] PSEG Rehearing Request at 16 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 75).

[225] *Id*. at 15-16.

[226] *Id*. at 14-15.

[227] *Id*. at 14.

[228] *Id*. at 16.

### b. Commission Determination

91. We deny rehearing concerning treatment of resources that are entitled to receive a State Subsidy. The December 2019 Order finds that PJM's MOPR must be expanded to permit the review and mitigation of capacity resources that receive or are entitled to receive State Subsidies.[229] The Commission determined that a seller shall be considered "entitled to" a State Subsidy "if the seller has a legal right or a legal claim to the subsidy, regardless of whether the seller has yet to actually receive the subsidy."[230] In addition, as PSEG points out on rehearing, the Commission found that a capacity resource should be considered to be "entitled to receive a State Subsidy if the resource previously received a State Subsidy and has not cleared a capacity auction since that time."[231] This rule is necessary to ensure that the expanded MOPR is effective – a State-Subsidized Resource that is not economic without its State Subsidy will not, by definition, clear the auction at its mitigated offer. A State-Subsidized Resource should not be able to bypass the MOPR by relying on time-shifted State Subsidies to reduce its offer in a given auction. If a resource needs to rely on a past State Subsidy (presumably an unused entitlement that is not already a sunk cost) or rely on a future State Subsidy (presumably an entitlement to receive money at some point after an auction occurs) to justify an offer below the default offer floor in a given auction then that offer must be mitigated, regardless of when the State Subsidy was, or will be, received.

92. Contrary to PSEG's contention, the Commission directly addressed the concern some parties raised that this language will cause over-mitigation because resources may be entitled to a subsidy, but not guaranteed to receive it.[232] The Commission explained:

> We disagree with intervenors' claim that it is inappropriate to mitigate resources that are entitled to a State Subsidy, but may not have actually received a State Subsidy yet. Resources that do not wish to be mitigated or believe they will not actually receive a State Subsidy to which they are entitled may certify to PJM that they will forego any State Subsidy under the Competitive Exemption.

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[229] December 2019 Order, 169 FERC ¶ 61,239 at PP 2, 37, 75 (adopting PJM's proposal that the MOPR should apply to resources that "receive or are entitled to receive" a State Subsidy). We acknowledge that the December 2019 Order uses "eligible," but intended to use "entitled" consistent with other paragraphs in the December 2019 Order. *See id*. P 67.

[230] *Id*. P 75 (agreeing with PJM's recommendation).

[231] *Id*.

[232] PSEG Rehearing Request at 14-15.

> Therefore, *mitigating offers by resources that receive or are entitled to receive a State Subsidy will only capture resources that are both . . . [entitled] to receive a subsidy and likely to accept one.*[233]

93. We continue to find this approach reasonable because, without this rule, a resource could offer into the market with the expectation that it will accept a State Subsidy for the relevant delivery year, even if it has not yet received the State Subsidy. This result would defeat the purpose of the expanded MOPR and suppress capacity market prices. We reiterate that even if PSEG is correct that requests for future revenues do not suppress offers, such resources will not be harmed because they will be able to demonstrate the competitiveness of their offers through the Unit-Specific Exemption.

### 6. Retail Rate Riders

#### a. Rehearing and Clarification Requests

94. The Ohio Commission, AES, and AEP/Duke seek rehearing of the December 2019 Order's finding that the OVEC-related retail rider is a State Subsidy. AES and AEP/Duke argue that the Commission acted arbitrarily and capriciously by including it in the definition of State Subsidy and failing to provide OVEC the same MOPR exemptions that it provided to similarly-situated existing resources that support federal objectives and policies, have already cleared a capacity auction or relied on prior Commission guidance indicating that resource decisions are not disruptive to the wholesale markets.[234]

95. AEP/Duke explain that the retail rate rider is related to recovery of costs incurred as a result of the Commission-approved Inter-Company Power Agreement (ICPA) between OVEC and OVEC's owners (sponsoring companies). AEP/Duke state that dispersion of voting rights ensures that none of OVEC's sponsoring companies can direct OVEC's management or operations, so neither the retail rate rider nor an owner's individual retail cost recovery has any impact on or connection to the continued operation

[233] December 2019 Order, 169 FERC ¶ 61,239 at P 76 (emphasis added); *see also supra* n.229 (replacing eligible with entitled).

[234] AEP/Duke Rehearing Request at 10; AES Rehearing and Clarification Request at 15-19; *see also* Ohio Commission Rehearing Request at 25-26 (asserting resources like the OVEC resources, receiving support pursuant to a Commission-jurisdictional agreement, should be exempt in the same way that federally supported resources are exempt).

of the plants or their participation in the PJM capacity auctions.[235] AES states that Dayton Power and Light Company, an AES subsidiary, is a co-owner of OVEC generation but has been trying unsuccessfully to divest its interest in the plant. AES explains that the budget and operational decisions regarding the resource, including whether to retire, are controlled by the self-supply entities who would not be subject to the MOPR under the December 2019 Order.[236] Therefore, AES contends, the OVEC retail rider is not a State Subsidy that could delay retirement of state-preferred resources, because the co-owners subject to the MOPR do not have the power to retire the resource.[237] In addition, according to AES, the OVEC units are not a state-preferred resource. Rather, AES explains that the Ohio Commission created a retail rate rider to allow full recovery of OVEC costs in recognition that these costs were prudently incurred before there was retail competition and are the result of a long-term contract (ICPA) that does not expire until 2040.[238]

96. AEP/Duke contend the Commission did not address the lack of a tether between the retail rate rider and the continued operation of OVEC generating units and that the failure to meaningfully address the differences between the retail rate rider and non-bypassable revenue arrangements that do affect continued operation and participation in the PJM capacity market is arbitrary and capricious.[239] AEP/Duke argue that any potential (though unstated) link between the Ohio retail rate rider and the operation and participation of OVEC units in the capacity market was further attenuated by the December 2019 Order, which expressly subjected three of the 13 OVEC sponsoring companies to the MOPR, while many other sponsoring companies would not be affected.[240]

97. AES and AEP/Duke argue this incongruity also unduly discriminates between co-owners of OVEC units and results in an unjust and unreasonable rate by imposing the MOPR on some owners, but not all, noting that the December 2019 Order would subject three of the sponsoring companies to the MOPR, while other sponsoring companies'

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[235] AEP/Duke Rehearing Request at 7 & n.15 (citing Ohio Valley Elec. Corp., Amended and Restated Inter-Company Power Agreement and Amended and Restated OVEC-IKEC Power Agreement, Docket No. ER11-3181-000, at 7 (filed Mar. 23, 2011)).

[236] AES Rehearing and Clarification Request at 17.

[237] *Id.* at 18.

[238] *Id.* at 17-19.

[239] *Id*. at 8 & n.18 (citations omitted).

[240] *Id*. at 9 & nn.19-20 (citations omitted).

shares would be unaffected; at least two sponsoring companies would be exempt via the Self-Supply Exemption, and sponsoring companies who use their shares for FRR Capacity Plans[241] AEP/Duke contend that this disparate treatment among sponsoring companies and their shares of OVEC capacity highlights that the December 2019 Order is not tailored to address the economic entry and exit of resources in the wholesale market because sponsoring companies cannot retire only their share of a unit.[242] AES argues that the ratemaking approach taken by the Ohio Commission yields the same results for Ohio utilities as the traditional ratemaking approach taken by other states with respect to their vertically integrated utilities and, therefore, the December 2019 Order should not treat these groups differently.[243] AES requests that the Commission extend the Self-Supply Exemption to all of OVEC's previously cleared generation units, rather than only those units owned by self-supply entities. AES states that the OVEC capacity not eligible for the Self-Supply Exemption is limited and known quantity that will not grow over time, has previously cleared the capacity market, and is the result of investments made long ago without regard to anything the December 2019 Order defines as a State Subsidy.[244] AEP/Duke posit that, in the same way the Self Supply Exemption is needed to respect the investment decisions of the existing self-supply resources that predate the December 2019 Order, all OVEC capacity that has previously cleared the auction should be entitled to a MOPR exemption.[245]

98. AEP/Duke assert that national security interests led to the creation of OVEC in the 1950s to supply electricity to a uranium enrichment facility, and therefore OVEC and/or

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[241] AEP/Duke Rehearing and Clarification Request at 8-9; AES Rehearing and Clarification Request at 3, 15, 18. AES explains that the Ohio Commission created a retail rate rider to place Ohio utilities with ownership shares in OVEC on equal footing as owners in other states that are vertically integrated utilities or cooperatives. When the traditional utilities or rural cooperatives sell capacity into PJM markets, the revenue is credited against their cost of service, as is the case for an off-system sale, and their retail customers are charged any residual net costs that remain after the credits. AES explains that the Ohio Commission created a retail rate rider that would continue to allow full recovery of OVEC costs, which would be charged to all retail customers, net of any revenues earned from sales into PJM. AES Rehearing and Clarification Request at 17.

[242] AEP/Duke Rehearing and Clarification Request at 9.

[243] AES Rehearing and Clarification Request at 19.

[244] *Id*. at 15 (acknowledging the Commission's rejection of exemptions for retail rate riders generally, but seeking an OVEC specific retail rate rider exemption); *see also* AEP/Duke Rehearing and Clarification Request at 14-15.

[245] AEP/Duke Rehearing and Clarification Request at 14-15.

the capacity market sellers that offer OVEC capacity into the PJM capacity market are similarly situated to resources receiving federal subsidies that have been exempted.[246] The Ohio Commission similarly contends that the level of compensation for OVEC is dictated by a FERC-jurisdictional agreement, which requires sponsoring companies to provide financial support to OVEC to the extent that the compensation otherwise available to OVEC is insufficient to cover OVEC's defined cost,[247] The Ohio Commission avers that its House Bill 6 did not actually change the compensation available to OVEC, which is under the Commission's jurisdiction, but only required that a portion of the support the Commission approved would be funded through a retail rate rider, placed a cap on the amount of support that is recoverable from Ohio retail customers, removed a return on equity allowance from the portion of the support allocated to Ohio retail customers, and limited the duration of time during which these costs can be recovered from Ohio retail customers. The Ohio Commission states that it would have corrected these facts on the record had there been opportunity to comment on the replacement rate, and that this lack of opportunity violates due process.[248]

99. AEP/Duke argue a MOPR exemption for the OVEC generating units is further supported by the December 2019 Order's treatment of QFs, which are not mitigated.[249] OVEC points out that the Commission focuses on the nature of the QF resource, i.e., that QF resources are built in furtherance of federal policy, regardless of the retail ratemaking treatment that the purchasing electric utility may employ.[250] AEP/Duke argue that similarly, OVEC's generating units were built pursuant to federal national security policy, and therefore the capacity provided by those generating units should not be mitigated.[251]

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[246] *Id*. at 4, 11-12. If the Commission does not grant rehearing, AEP/Duke request clarification that a MOPR exemption would apply to OVEC generating units and/or the capacity market sellers who control OVEC capacity. *Id*. at 3 & n.5 (citations omitted).

[247] Ohio Commission Rehearing Request at 24, n.31. AEP/Duke also argue that OVEC and/or the capacity market sellers that offer OVEC capacity are similarly situated to resources receiving federal subsidies that have been exempted. AEP/Duke Rehearing Request at 11-13.

[248] Ohio Commission Rehearing Request at 25.

[249] *Id*. at 12-13 & n.27 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 67 n.143).

[250] *Id*. at 13.

[251] *Id*.

### b. Commission Determination

100. We deny rehearing as to whether retail rate riders generally should be considered a State Subsidy. We reject arguments that OVEC resources should be exempt from the expanded MOPR because they were built pursuant to federal policy objectives. The December 2019 Order stated that the Commission would not apply the expanded MOPR to federal subsidies because the Commission's authority to set just and reasonable rates is delegated by Congress through the FPA, and that statute has the same legal force, and springs from the same origin, as any other federal statute.[252] Parties appear to confuse federal legislation with other less-formal efforts undertaken to support certain federal policy objectives. The OVEC resources are not supported by a federal subsidy, but by a State Subsidy that parties argue supports federal goals. Likewise, the OVEC resources are not similarly situated to QFs, because, while states may implement PURPA, they do so pursuant to federal law.

101. Further, the June 2018 Order and December 2019 Order both found that State Subsidies provided or required by certain states for the purpose of supporting the entry or continued operation of preferred generation resources that may not otherwise be able to succeed in a competitive wholesale capacity market lead to unjust and unreasonable market distortions.[253] Neither order required that the State Subsidy be received by a market participant that is able to make the decision to enter or exit the market, nor is such a requirement just and reasonable.

102. However, given the unique and longstanding supply arrangements associated with the OVEC resources, to the extent a retail rate rider associated with the OVEC resources was in place prior to the December 2019 Order, we here clarify that such a retail rider is appropriately treated in a manner similar to existing self-supply arrangements and is thus exempt from application of the MOPR.[254] That said, with respect to arguments that some owners of the OVEC resources may be fully exempt from the expanded MOPR but not others, we find that such a result is not unduly discriminatory. The expanded MOPR is designed to reach State Subsidies, regardless of ownership. The fact that State Subsidies may differ among owners is not surprising and is immaterial, as different states' policies may vary. Therefore, to the extent an OVEC owner is not exempt from the MOPR

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[252] December 2019 Order, 169 FERC ¶ 61,239 at P 89.

[253] June 2018 Order, 163 FERC ¶ 61,236 at P 150; December 2019 Order, 169 FERC ¶ 61,239 at P 1.

[254] We note that OVEC resources received retail rate riders as approved by the Ohio Commission for a number of years prior to enactment of HB 6.

pursuant to the exemptions described in the December 2019 Order or as extended here, it is not unduly discriminatory to apply the MOPR to such owner's resources.

### 7. General Industrial Development and Local Siting Subsidies

#### a. Rehearing and Clarification Requests

103. Parties disagree with the December 2019 Order's finding that general industrial development and local siting subsidies are excluded, arguing it is arbitrary and capricious.[255] DC Attorney General argues the Commission's rationale for excluding general and industrial development and local siting subsidies is flawed because state clean energy programs are also not directed at or tethered to the capacity market.[256] DC Attorney General adds that the tethered to/directed at distinction is irrelevant because it focuses on the intent of the programs, not their effects.[257] DC Attorney General states that, while enterprise zones appear available to all industry, localities specifically expand zones and grant tax incentives just for generation resources.[258] DC Attorney General argues that if the intent is to mitigate the effect of state subsidies and only exempt subsidies pursuant to federal law, then it is arbitrary and capricious for the Commission to consider and address the purported effects of certain state subsidies but not others.[259] Clean Energy Advocates argue that the Commission cannot say that a combination of policies it allows, such as local siting support, will produce a more or less efficient market outcome than the policies it does not allow, such as RPS programs.[260] Clean Energy Advocates further argue that, under the December 2019 Order, a resource that

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[255] DC Attorney General Rehearing Request at 22 & n.74 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 83); *see also* Public Citizen Rehearing Request at 4; *see generally* DC Attorney General Rehearing Request at 22-24.

[256] DC Attorney General Rehearing Request at 22; *see also* Consumers Coalition Rehearing Request at 37-38.

[257] DC Attorney General Rehearing Request at 22 (citing *MPS Merch. Servs. v. FERC*, 836 F.3d 1155, 1170 (9th Cir. 2016) (stating the Commission has "long and repeatedly" held that FPA sections 205(b) and 206 "do not contain any reference to intent . . . . [T]he Commission is to be concerned with anticompetitive *effects*, not motives.") (quoting *In re Mo. Power & Light Co.*, 5 FERC ¶ 61,086, at 61,140 (1978) (emphasis added))).

[258] DC Attorney General Rehearing Request at 23.

[259] *Id*. at 24.

[260] Clean Energy Advocates Rehearing Request at 32.

receives payments in lieu of taxes, rebates, or other subsidy may continue to make lower offers incorporating that public support and thereby suppress auction-clearing prices so long as the public support has the goal of bringing the resource to a particular locality, rather than encouraging the use of certain fuel.[261] Clean Energy Associations argue that the Commission does not explain why it assumes state and local incentives are not directed at or tethered to the operation of a generating resource, given that in providing the incentive, the state expects that the power plant will be constructed and operated.[262]

104. J-POWER requests that the Commission clarify the types of "generic industrial development and local siting support" programs that will not be considered State Subsidies and will therefore be exempt from the expanded MOPR under the December 2019 Order.[263] J-POWER requests that the Commission confirm that a program that is intended to promote the development of a geographic area or zone could qualify as "local siting support" under the December 2019 Order, so long as "the support at issue is available to all businesses and is not "nearly [directed at] or tethered to the new entry or continued operation of generating capacity."[264] J-POWER also requests that the Commission confirm that PJM's compliance filing in response to the December 2019 Order should propose a process whereby PJM, in consultation with the Market Monitor, will determine if state payments or benefits qualify as "generic industrial development" or "local siting" support programs, and that market participants should have the ability to challenge such determinations before the Commission. J-POWER posits that clarification regarding the Commission's intent will help minimize the potential for future disputes, while also providing a process for addressing any disputes that do arise.[265]

105. Clean Energy Associations request clarification that any state, county or local property tax relief does not constitute a State Subsidy. Clean Energy Associations argue that such an exclusion would align with the December 2019 Order, which has already accepted MOPR exclusions for general industrial development in an area and programs

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[261] *Id*. at 58.

[262] Clean Energy Associations Rehearing and Clarification Request at 40-41; *see also* DC Attorney General Rehearing Request at 22 & n.74 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 83).

[263] J-POWER Clarification Request at 2 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 83).

[264] *Id*. at 11 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 68).

[265] *Id*.

designed to incent siting facilities in one location over another.[266] Clean Energy Associations assert that property tax relief is intended to incent developers to locate their projects in a particular place and the abatement has nothing to do with the capacity market.[267]

### b. <u>Commission Determination</u>

106. We deny the rehearing requests regarding general industrial development and local siting support. General industrial development and local siting support are not nearly "tethered" to the new entry or continued operation of generating capacity but are rather forms of support that are generally available to businesses in an area, unlike, for example, RPS programs and state clean energy programs. General opportunities, such as a state locating a generation resource in a particularly prime location for purposes of generic economic development, are too attenuated to be "directed at or tethered to the new entry or continued operation of generating capacity" in the PJM capacity market. We disagree that the Commission erred in excluding general industrial development and generic local siting subsidies from the expanded MOPR because such generic subsidies (i.e., those that are available to enterprises other than generating resources) may permit a generating resource to offer at a lower capacity price because it built in one state-preferred location, rather than another less-preferred location. As we said in the December 2019 Order, the expanded MOPR is not intended to address all commercial externalities or opportunities that might affect the economics of a particular resource.[268]

107. With regard to J-POWER's request for clarification regarding generic industrial development subsidies, we clarify that these include payments (including payments in lieu of taxes), concessions, rebates, subsidies, or incentives designed to promote, or participation in a program, contract or other arrangement that utilizes criteria designed to incent or promote, general industrial development in an area. With respect to local siting, these include payments, concessions, rebates, subsidies or incentives designed to promote, or participation in a program, contract or other arrangements from a county or

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[266] Clean Energy Associations Rehearing and Clarification Request at 60 (citing December 2019 Order, 169 FERC ¶ 61,239 at PP 78, 83).

[267] *Id.*

[268] December 2019 Order, 169 FERC ¶ 61,239 at P 68. We also disagree with the D.C. Attorney General that the directed at/tethered to language suggests that the Commission is regulating the intent of the subsidy, rather than its effects. As stated in the June 2018 Order, December 2019 Order, and herein, the expanded MOPR addresses the effect of State Subsidies on the PJM capacity market, regardless of intent of the subsidy.

other local government authority using eligibility or selection criteria designed to incent, siting facilities in that county or locality rather than another county or locality.

108. We decline, however, to prejudge how these programs should be addressed in the compliance filing, including how they should be identified and whether there should be a process to challenge that identification at the Commission.

109. With regard to Clean Energy Associations' request to clarify that any state, county, or local property tax relief is not a State Subsidy, we reiterate that the December 2019 Order defined State Subsidies, and any out-of-market payment that fits within that definition will be considered a State Subsidy, including tax relief or other concessions that are not generally applicable.[269]

### 8. Federal Subsidies

#### a. Requests for Rehearing and Clarification

110. Parties argue that the December 2019 Order is arbitrary and capricious because it finds that federal and State Subsidies impact the market similarly, but only mitigates State Subsidies, making the December 2019 Order internally inconsistent.[270] For example, DC Attorney General asserts that the Commission's justification that it lacks the authority "to disregard or nullify the effects of federal legislation logically applies equally to state subsidies," which parties contend are nullified by the December 2019 Order without explanation as to why federal subsidies are treated differently than state programs.[271] The Illinois Commission states that the Commission's decision to exempt all resources receiving federal subsidies from the MOPR, while applying the MOPR to

[269] December 2019 Order, 169 FERC ¶ 61,239 at P 67.

[270] Public Citizen Rehearing Request at 3 (citing December 2019, 169 FERC ¶ 61,239 at P 9); EPSA/P3 Rehearing and Clarification Request at 5 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 89); Clean Energy Associations Rehearing and Clarification Request at 42; Illinois Attorney General Rehearing Request at 15 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 87); New Jersey Board Rehearing and Clarification Request at 38; Exelon Rehearing and Clarification Request at 26-27.

[271] DC Attorney General Rehearing Request at 21-22 (quoting December 2019 Order, 169 FERC ¶ 61,239 at PP 10, 40) (citing December 2019 Order, 169 FERC ¶ 61,239 at P 16); Maryland Commission Rehearing and Clarification Request at 12-13; FES Rehearing Request at 19-20; Ohio Commission Rehearing Request at 7-10.

resources affected by state policy, unduly discriminates against resources affected by state policy.[272]

111. Parties assert that when Congress by statute reserved to states the power to regulate generation facilities, it recognized states' power to favor certain types of resources over others.[273] They assert that when states exercise this Congressionally-vested authority to provide State Subsidies, they do so with congressional approval no less than when Congress itself decided to assist particular types of resources.[274] They argue that, therefore, when the Commission applies the MOPR to "disregard or nullify" states' exercise of this authority, its action is just as inconsistent with Congress's policy as it would be to apply the MOPR to federal subsidies.[275] They contend that the Commission cannot invoke respect for Congress to justify exempting federal subsidies from the MOPR, while at the same time applying the MOPR to "disregard or nullify the effect" of State Subsidies.[276] DC Attorney General asserts that the case law the Commission cites to support the exclusion of federal subsidies is inapplicable and irrelevant, relating to general canons of statutory law.[277] Consumers Coalition argue that the Commission did not support its finding that mitigating federal subsidies would disregard or nullify the effect of other federal legislation because it did not cite any federal statutes that Congress intended to be exempt from FPA rate regulation or engage in statutory analysis to determine whether mitigating federal subsidies would nullify the relevant federal statute.[278] Moreover, absent express Congressional intent to the contrary, it is presumed that the powers and directions under several federal statutes subsist together.[279] Consumers Coalition state that the federal government provides tens of

[272] Illinois Commission Rehearing Request at 12.

[273] *See, e.g.*, Exelon Rehearing and Clarification Request at 4, 27; Consumers Coalition Rehearing Request at 28-30.

[274] *See* Exelon Rehearing Request at 27.

[275] *See id*. at 4, 27; Consumers Coalition Rehearing Request at 28-30.

[276] *See* Exelon Rehearing and Clarification Request at 4, 27; Consumers Coalition Rehearing Request at 28-30.

[277] DC Attorney General Rehearing Request at 22 & n.72.

[278] Consumers Coalition Rehearing Request at 31-33.

[279] *Id.* at 31 & n.72 (citing *Posadas v. Nat'l City Bank of N.Y.*, 296 U.S. 497, 504 (1936)).

billions of subsidies every year to benefit electric generators, most to fossil-fuel generation, and that Congress is cognizant of state subsidies when it does so, conditioning the size of the federal subsidy on state support.[280] The Maryland Commission asserts that the bifurcation between state and federal subsidies means that for implementation purposes that resources receiving both federal and state subsidies are simultaneously exempt and subject to mitigation.[281]

112. Exelon states that the laws creating the production tax credit, for example, did not impliedly repeal or narrow the Commission's authority to set just and reasonable wholesale rates.[282] Rather, the more logical determination of the Commission's position is that, as a matter of policy, the Commission should not use its rate-setting authority to work at cross-purposes with other federal programs.[283]

113. EPSA/P3 argue the December 2019 Order's conclusion to not mitigate federal subsidies is based on an erroneous view of the law and therefore the Commission failed to exercise the discretion delegated to it by Congress in the FPA.[284] EPSA/P3 argue the Commission failed to respond meaningfully to arguments that the Commission should not assume that Congress intended for it to abdicate its ratemaking obligations absent an express directive or to arguments regarding the need to apply the MOPR to resources receiving federal subsidies, including arguments that the Commission should not defer to other federal agencies with separate responsibilities.[285] EPSA/P3 assert that the Supreme Court made clear that the Commission should not assume that Congress intended for the Commission to ignore its statutory responsibilities simply because Congress passed legislation that could impact wholesale rates.[286] EPSA/P3 also argue that the

[280] *Id*. at 35-37 (citing as example 26 U.S.C. 45(b)(3)(A)(i)-(iv.)).

[281] *Id*. at 36.

[282] Exelon Rehearing and Clarification Request at 26.

[283] *Id*. at 26-27.

[284] EPSA/P3 Rehearing and Clarification Request at 5 (citing *Prill v. NLRB*, 755 F.2d 941, 947 (D.C. Cir. 1985)).

[285] *Id*. (citing *Pub. Utils. Comm'n of Cal. v. FERC*, 462 F.3d at 1051 (9th Cir. 2006); *PPL Wallingford Energy LLC v. FERC*, 419 F.3d at 1198 (D.C. Cir. 2005); *Moraine Pipeline Co. v. FERC*, 906 F.2d 5, 9 (D.C. Cir. 1990))).

[286] *Id*. at 10 (citing EPSA Initial Brief at 17-18 & n.76 (explaining that the Supreme Court has found that "Congress does not alter the fundamental details of a

Commission should assume that Congress is aware of the Commission's authority to address the impact of federal subsidies on wholesale rates and could limit the Commission's ability to address such effects going forward.[287]

114. EPSA/P3 clarify that they are not arguing that the Commission should apply the MOPR to all federal subsidies, but that the Commission erred in declining to expand the MOPR to any federal subsidies.[288] EPSA/P3 acknowledge that the reasoning laid out in the December 2019 Order may justify exempting from the expanded MOPR subsidies directly awarded by Congress, but argue it does not justify exempting subsidies awarded by another federal agency. EPSA/P3 contend that Congress has not transferred responsibility for the justness and reasonableness of wholesale rates to another federal agency.[289]

115. The Ohio Commission argues that the December 2019 Order frustrates federal policies because it would subject to the MOPR resources receiving State Subsidies that are aligned with the federal government's stated goals, such as promoting fuel diversity.[290] The Ohio Commission also notes that the Department of Energy has recently supported the competitiveness of one of Ohio's nuclear plants through a grant, and the Commission should avoid frustrating these federal policies.[291]

116. Allegheny states the electric cooperative business model is enshrined in federal law in the form of the Rural Electrification Act (7 U.S.C. §§ 901-18) and Federal Power Act, for which the Commission showed no regard, despite expressly excluding federal subsidies from mitigation.[292]

117. PJM states that it interprets the December 2019 Order as requiring PJM to apply the MOPR to any resource receiving both a State Subsidy and a federal subsidy, because the State Subsidy triggers the MOPR. PJM seeks clarification as to whether it should

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regulatory scheme in vague terms or ancillary provisions – it does not, one might say, hide elephants in mouseholes" (citations omitted))).

[287] *Id*.

[288] *Id*. at 7.

[289] *Id*. at 8-9.

[290] Ohio Commission Rehearing Request at 13-14.

[291] *Id*. at 14, 21, 23-24 & n.31; *see also* New Jersey Board Rehearing Request at 39-40.

[292] Allegheny Rehearing Request at 8-9.

determine competitive net costs of a resource receiving both federal and State Subsidies by removing the revenue benefit of the State Subsidy, but retaining the revenue benefit of the federal subsidy.[293]

### b. **Commission Determination**

118. We deny rehearing and affirm our directive that the replacement rate will not require mitigation of capacity offers that are supported by federal subsidies.[294] As we explained, Congress delegated to the Commission the authority to set just and reasonable rates, terms and conditions of service for the transmission and sale at wholesale of electricity in interstate commerce through the FPA.[295] Congress also directed subsidies through other federal statutes. These statutes have the same legal force as the FPA and we decline to use our ratemaking authority over federally regulated wholesale markets to address the effects of other federal statutes.

119. We disagree with parties' contention that the December 2019 Order is arbitrary and capricious, internally inconsistent and unduly discriminatory because the Commission finds that federal subsidies and State Subsidies impact the market similarly, but only mitigates State Subsidies.[296] While federal subsidies may affect capacity market prices, the source of authority for federal subsidies, as opposed to State Subsidies, is not equivalent. Federal subsidies are authorized by federal statutes; State Subsidies are authorized by state laws. Not all discrimination is "undue" discrimination.[297] The

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[293] PJM Rehearing and Clarification Request at 26.

[294] December 2019 Order, 169 FERC ¶ 61,239 at PP 10, 84-85,

[295] 16 U.S.C. § 824(a) to (b). The Commission's jurisdiction includes the power to set rates for capacity, either directly or indirectly through a market mechanism. *Connecticut PUC*, 569 F.3d at 482-84.

[296] Public Citizen Rehearing Request at 3 (citing December 2019 Order, 169 FERC ¶ 61,239 at 9); EPSA/P3 Rehearing and Clarification Request at 5 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 89; 16 U.S.C. §§ 824d, 824e (2018)); *United States v. City of Detroit*, 720 F.2d 443, 451 (6th Cir. 1983); Clean Energy Associations Rehearing and Clarification Request at 42; Illinois Attorney General Rehearing Request at 15 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 87); New Jersey Board Rehearing and Clarification Request at 38; Exelon Rehearing and Clarification Request at 26-27.

[297] *See, e.g.*, *St. Michaels Utils. Comm'n v. FPC*, 377 F.2d 912, 916 (4th Cir. 1967) (holding that the FPA permits differences in a public utility's rates, terms and conditions of service where they are based on appropriate factual differences).

Commission has a reasonable basis to distinguish federal subsidies and State Subsidies, that is, whether the subsidies were established via federal law or state law.[298]

120. We disagree with DC Attorney General's assertion that the precedent cited in the December 2019 Order is irrelevant.[299] These "general canons of statutory law" – cautionary principles – reflect judicial guidance regarding the appropriate way to reconcile Congressional directives. Congress has not delegated to the Commission the judicial authority to reconcile asserted conflicts in federal legislation. We agree with Consumers Coalition that, absent express Congressional intent to the contrary, it is presumed that the powers and directions under several federal statutes are equally valid.[300] In our view, not subjecting federal subsidies to the expanded MOPR is precisely the result of recognizing that all federal statutes are equally valid.

121. Contrary to Consumer Coalition's contention, the Commission need not rely on specific statutes stating that Congress intended any particular federal subsidy to be exempt from FPA rate regulation in order to defer to Congress. Nor did the Commission have to engage in specific statute-by-statute analysis to determine whether some federally legislated subsidies warrant mitigation but not others. We affirm our decision to decline to use our ratemaking authority over federally regulated wholesale markets to address the effects of other federal statutes.

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[298] Additionally, while the FPA recognizes that states have exclusive authority over generation facilities, *see* 16 U.S.C. § 824(b)(1) (2018), the FPA is certainly not the source of this authority and thus, contrary to Exelon's contention, does not "vest" states with authority to provide State Subsidies to preferred resources. *See* Exelon Rehearing and Clarification Request at 4, 27. The FPA was originally a "gap-filler" statute, designed to allow the federal government to step in and regulate interstate transactions over which no single state had authority to regulate. *See EPSA*, 136 S. Ct. at 767 (citing *Pub. Util. Comm'n of R.I. v. Attleboro Steam & Elec. Co.*, 273 U.S. 83, 89-90 (1927)). For example, section 201(a) of the FPA provides that federal regulation is "to extend only to those matters which are not subject to regulation by the States." 16 U.S.C. § 824(a). It cannot be said, therefore, that the FPA's recognition of states' authority over generation resources places State Subsidies on par with federal subsidies because they are both authorized by Congress. Regardless, the December 2019 Order does not regulate state decisions about generation resources; it is only regulating rates in the wholesale capacity markets.

[299] *See* December 2019 Order, 169 FERC ¶ 61,239 at P 89 & n.177 (citing *Morton*, 417 U.S. at 550-51; *Silver*, 373 U.S. at 357; *Tug-Allie-B*, 273 F.3d at 941).

[300] *See* Consumers Coalition Rehearing Request at 31 & n.72 (citing *Posadas v. Nat'l City Bank of N.Y.*, 296 U.S. 497, 504 (1936)).

122. Additionally, Consumers Coalition states that some federal subsidies depend on the size of a State Subsidy,[301] such that applying the expanded MOPR to the State Subsidy thwarts Congressional intent. Noting that the Department of Energy has recently supported the competitiveness of one of Ohio's nuclear plants through a grant,[302] the Ohio Commission similarly argues that the December 2019 Order frustrates federal policies because it would subject to the MOPR resources receiving State Subsidies that are aligned with the federal government's stated goals, such as promoting fuel diversity.[303] We disagree. Consumers Coalition and the Ohio Commission confuse federal goals with federal legislation. The amount of the federal subsidy initially is derived from the amount of the State Subsidy, and the amount of the federal subsidy will not change if the resource's offer is subject to the MOPR. A resource's offer will be mitigated based on the State Subsidy, but, as PJM in its rehearing request proposes to implement it, PJM will determine the resource's competitive net costs by removing the State Subsidy benefit and retaining the federal subsidy benefit.[304] The December 2019 Order implements federal policy, simultaneously respecting federal goals and federal legislation. We fail to see how the Commission thwarts federal intent by mitigating in the PJM capacity market a State Subsidy that may determine the size of the federal subsidy, when the amount of the federal subsidy is not affected by application of the MOPR to the resource's offer.

123. EPSA/P3 attempts to draw a distinction between federal subsidies that are directly awarded by Congress and federal subsidies that are provided by other federal agencies.[305] We find this distinction irrelevant here. Federal agencies are creatures of statute and, therefore, to the extent a federal agency is awarding a federal subsidy, it is doing so pursuant to authority provided by Congress. Whether Congress provides the subsidy directly by statute, or through an agency it has authorized to provide federal subsidies, the source of authority is still a federal statute.

124. We disagree with the contention voiced by EPSA/P3 that "the Commission assumed that Congress intended for it to abdicate its ratemaking obligations absent an

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[301] *Id*. at 35-37 & n.88 (citing as example 26 U.S.C. § 45(b)(3)(A)(i)-(iv)).

[302] Ohio Commission Rehearing Request at 14; *see also* New Jersey Board Rehearing Request at 40.

[303] Ohio Commission Rehearing Request at 13-14.

[304] PJM Rehearing and Clarification Request at 26.

[305] *See* EPSA/P3 Rehearing and Clarification Request at 9.

express directive."[306] We are not abdicating our ratemaking obligations; we are simply declining to use our ratemaking authority to address the potential rate effects of federal statutes other than the FPA. Further, EPSA/P3's argument that the MOPR should apply to federal subsidies because Congress has not transferred responsibility for the justness and reasonableness of wholesale rates to another federal agency[307] is misguided. Refraining from mitigating federal subsidies authorized by other federal agencies is not tantamount to transferring the Commission's FPA obligation to ensure the justness and reasonableness of rates. We have exercised our FPA authority to find the replacement rate is just and reasonable and not unduly discriminatory or preferential without mitigating capacity offers supported by federal subsidies.[308] We grant PJM's request for clarification that it should determine competitive net costs of a resource receiving both federal and State Subsidies by removing the revenue benefit of the State Subsidy, but retaining the revenue benefit of the federal subsidy.

### 9. Materiality Thresholds

#### a. Rehearing and Clarification Requests

125. PJM argues that the December 2019 Order's rejection of materiality thresholds is not adequately supported, creates sweeping burdens for PJM and stakeholders (which the Commission did not consider at all), and creates uncertainty for small resources that are otherwise accommodated in the wholesale markets.[309] PJM continues that the presumption that all resource offers must be reviewed and mitigated regardless of size or impact, or else auction prices will become unreasonable, is not supported by the record and that the Commission has acted without adequate consideration of the administrative burdens (including to review unit-specific offers).[310]

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[306] *Id*. at 3.

[307] *Id*. at 8-9.

[308] *See, e.g.*, *Cal. Indep. Sys. Operator, Corp.*, 138 FERC ¶ 61,060, at P 76 & n.17 (2012) ("We are required to adopt just and reasonable rates terms and conditions. We are not required to adopt the best or most reasonable approach) (citation omitted)).

[309] PJM Rehearing and Clarification Request at 16 (citing *Elec. Storage Participation in Mkts. Operated by Reg'l Transmission Organs. & Indep. Sys. Operators*, Order No. 841, 162 FERC ¶ 61,127, at P 271 (2018) (creating rules to help smaller resources)).

[310] PJM Rehearing and Clarification Request at 16.

126. Clean Energy Associations and Clean Energy Advocates assert that the Commission provided no record evidence that resources that meet PJM's proposed materiality thresholds would have any direct price impact.[311] Furthermore, Clean Energy Associations argue that, even if it could be shown that such resources could impact capacity market prices, there is no evidence presented, nor any argument or analysis offered by the Commission, showing that such impact would be anything other than de minimis.[312]

127. Advanced Energy Entities argue that the December 2019 Order does not address PJM's assertion that some resources are too small, individually or collectively, to meaningfully impact price outcomes in rejecting the proposed materiality thresholds. Advanced Energy Entities also argue the December 2019 Order is contradictory because it finds that any level of State Subsidy is capable of distorting capacity prices, but also that the Commission is concerned with the aggregate impact of small resources, and not just a single resource.[313]

128. AES requests that, if the Commission does not adopt its proposed Proportional MOPR on rehearing, it should grant rehearing to institute a materiality threshold of 50 MW.[314] AES explains that a materiality threshold is appropriate because smaller generators have little or no ability, individually, to affect the market significantly or engage in price suppression and argues the December 2019 Order offered no evidence that small resources, either individually or in aggregate, were actually impacting market outcomes.[315]

129. AES also recommends a "fifteen percent demarcation between material and non-material levels of out-of-market support."[316] Alternatively, AES argues that the Commission could establish different threshold levels for State Subsidies that are

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[311] Clean Energy Associations Rehearing and Clarification Request at 15; Clean Energy Advocates Rehearing Request at 42.

[312] Clean Energy Associations Rehearing and Clarification Request at 15-16.

[313] Advanced Energy Entities Rehearing and Clarification Request at 21-22.

[314] AES Rehearing and Clarification Request at 7-8.

[315] *Id*.

[316] *Id*. at 9.

capacity related and those that are not, such as RECs. AES argues that RECs are earned based on output, and often sold in advance, such that they are "sunk revenues."[317]

### b. Commission Determination

130. We deny rehearing and continue to reject PJM's proposed materiality thresholds, as well as other parties' proposed alternative materiality thresholds, because, as the Commission previously explained, out-of-market support at any level is capable of distorting capacity prices,[318] and even small resources, in aggregate, may have the ability to impact capacity prices.[319] We reiterate that a materiality threshold implies that there is a threshold under which a State-Subsidized Resource participating in the capacity market has a *de minimis* effect on prices.[320] We disagree, and affirm our finding that State Subsidies at any level are capable of distorting capacity prices.[321] PJM's use of a single-price auction concept means that, regardless of the number of resources or MWs, below-cost offers resulting from State Subsidies may reduce the capacity price if, individually or in aggregate, such resources displace a higher priced offer that would have set the clearing price had the State-Subsidized Resource submitted an offer based on its actual marginal cost. State-Subsidized Resources need less revenue from the market than they would without a State Subsidy, and the rational choice for such resources, given their desire to participate in PJM's capacity market to secure additional revenues, is to reduce their offers commensurately to increase their opportunity to clear the market. In short,

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[317] *Id*. at 9-10.

[318] December 2019 Order, 169 FERC ¶ 61,239 at P 98 & n.202 (citing June 2018 Order, 163 FERC ¶ 61,236 at P 150); s*ee also* June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 28. We reaffirm our decision to decline to adopt a materiality threshold based on either the level of State Subsidies or the size of State-Subsidized Resources. *See* December 2019 Order, 169 FERC ¶ 61,239 at P 10.

[319] December 2019 Order, 169 FERC ¶ 61,239 at PP 10, 98-99.

[320] *Id*. P 98. We disagree with Advanced Energy Entities' assertion that the December 2019 Order is contradictory because, on the one hand, it finds that any level of State Subsidy is capable of distorting capacity prices, but on the other hand, the Commission registers its concern with the aggregate impact of small resources, and not just a single resource. *See* Advanced Energy Entities Rehearing and Clarification Request at 21-22. Any level of State Subsidy is capable of distorting capacity prices because below cost offers from State-Subsidized Resources, either individually or on aggregate, can displace offers of non-subsidized resources.

[321] December 2019 Order, 169 FERC ¶ 61,239 at P 98 & n.202; June 2018 Order, 163 FERC ¶ 61,236 at P 150); June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 28.

State-Subsidized Resources have the ability to suppress capacity market clearing prices below competitive outcomes by offering below their costs.[322] Therefore, we continue to find that adopting a materiality threshold would undermine the very purpose of the Commission's action in this proceeding.[323]

131. Contrary to parties' contentions, the Commission had sufficient evidentiary support to reject the proposed materiality thresholds. Record evidence showed the expected increase in state support for renewable resources, many of which would be exempt from the expanded MOPR under PJM's proposed capacity threshold.[324] As the Commission elaborated in the December 2019 Order, on aggregate, small State-Subsidized Resources may have the ability to impact capacity prices, resulting in unjust and unreasonable rates. On rehearing, neither PJM nor any other party has provided evidence or demonstrated that this rationale is flawed.

132. We reiterate that if a State Subsidy is truly immaterial, the resource's offer should be competitive without it.[325] Should the resource believe its offer is justified by its costs, it will not be disadvantaged as it can avail itself of the Unit-Specific Exemption to justify an offer below the default offer price floor or it could choose to forego any State Subsidy under the Competitive Exemption in favor of unmitigated participation in the capacity market.[326]

133. Additionally, we are not persuaded that implementing the expanded MOPR will be unduly burdensome to PJM and its market participants. We recognize that ensuring application of the expanded MOPR to all new and existing resources that lack an exemption (and ensuring exemption-holders are genuine) may require additional time and effort. However, an essential function of an RTO is to ensure a competitive marketplace.[327] And, with over a decade of experience calculating competitive capacity

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[322] *See* June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 25-27.

[323] December 2019 Order, 169 FERC ¶ 61,239 at P 98.

[324] June 2018 Order, 163 FERC ¶ 61,236 at P 150.

[325] December 2019 Order, 169 FERC ¶ 61,239 at P 99.

[326] *Id*.

[327] *See, e.g.*, CASPR Order, 162 FERC ¶ 61,205 at P 21 (stating that, among other things, a "capacity market should facilitate robust competition for capacity supply obligations"); *Regional Transmission Organizations*, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999) (cross-referenced at 89 FERC ¶ 61,285), *order on reh'g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000) (cross-referenced at 90 FERC

cost-based offers, we find it unlikely that the Market Monitor and PJM will be unable to manage[328] all requests for unit-specific exemptions. Indeed, the Market Monitor has not voiced any such concern in this proceeding and has stated there should be no minimum size to which market rules apply.[329]

### 10. Costs and Balance of Interests and Impacts

#### a. Requests for Rehearing and Clarification

134. Parties argue that the Commission erred by not considering the cost impacts of the replacement rate or appropriately balancing consumer and investor interests, as well as the risks of over-mitigation.[330] Parties reiterate that the replacement rate requires some

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¶ 61,201), *aff'd sub nom. Pub. Util. Dist. No. 1 of Snohomish Cty. v. FERC*, 272 F.3d 607 (D.C. Cir. 2001).

[328] Indeed, in a separate proceeding, the Market Monitor notes it could handle additional review associated with lowering the default capacity market seller offer cap. *See* Market Monitor Answer, Docket No. EL19-47-00l, at 9-13 (filed Feb. 21, 2019).

[329] Market Monitor Reply Testimony at 5 (filed Nov. 6, 2018).

[330] New Jersey Board Rehearing and Clarification Request at 26-27; FES Rehearing Request at 7, 14; Buyers Group Clarification and Rehearing Request at 2; Consumer Representatives Rehearing and Clarification Request at 11; Clean Energy Associations Rehearing and Clarification Request at 22-23; Clean Energy Advocates Rehearing Request at 80 (December 2019 Order ignores billions of dollars in increased costs and fails to explain why the Commission's goal of protecting the PJM capacity market price signals outweighs this increase); Pennsylvania Commission Rehearing and Clarification Request at 12; ELCON Rehearing Request at 6-7; Ohio Commission Rehearing Request at 10 (increases costs without a commensurate increase in reliability); Consumers Coalition Rehearing Request at 44-47 (procures excess capacity at excessive prices); OPSI Rehearing and Clarification Request at 6-7); DC Attorney General Rehearing Request at 1-3, 8-17 (raising electricity rates for low income communities, increasing risk of climate change, undermining green jobs); West Virginia Commission Rehearing Request at 4; Public Power Entities Rehearing and Clarification Request at 10, 23, 24 & n.109, 49-50; NEI Rehearing Request at 4-5, 10 (Commission ignored concerns that customers may have to pay twice for capacity and the adverse impacts on the larger public interest within PJM's footprint); Exelon Rehearing and Clarification Request 21-27 (citing December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 23, n.92) (stating that the replacement rate would likely increase the cost of capacity at least 2.4 billion dollars per year)); NEI Rehearing Request at 5, 10 (arguing that the

customers, namely the ratepayers of states with disfavored policies, to "pay for capacity twice."[331] Consumer Representatives state the Commission is best situated to address the problem and must act in accordance with its consumer protection duties under the FPA, rather than shifting the burden to states under the notion that states bear the consequences of their actions.[332] Clean Energy Associations assert that PJM's MOPR-Ex proposal would result in procurement of between $14 billion and $24.6 billion of redundant capacity over the next 10 years.[333] Exelon argues that the Commission has failed to identify any concrete reliability benefits that would result from the replacement rate, nor can it, because reserve margins are well above the target.[334]

135. Clean Energy Associations and Clean Energy Advocates contend that the Commission failed to quantify or acknowledge the additional costs that PJM, the Market Monitor, and market participants will bear in implementing the replacement rate, or whether these costs justify the replacement rate.[335] Clean Energy Associations argue that the December 2019 Order conflates resource adequacy with the capacity market rate, and that by administratively increasing the rate for capacity, the Commission will cause customers to overpay for resource adequacy.[336] OPSI asserts that the December 2019 Order does not, and cannot, quantify the degree of its related cost increase, due to the

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Commission was obligated to examine the ultimate impact on consumers and environmental attributes).

[331] Illinois Attorney General Rehearing Request at 14; Consumer Representatives Rehearing and Clarification Request at 7, 11.

[332] Consumer Representatives Rehearing and Clarification Request at 12-16 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 41); *see* 16 U.S.C. § 824a.

[333] Clean Energy Associations Rehearing and Clarification Request at 22-23 (citing Clean Energy Associations, Affidavit of Michael Goggin, Docket No. ER18-1314-000 (May 7, 2018)); *see also* ELCON Rehearing Request at 6-7.

[334] Exelon Rehearing and Clarification Request at 23-24; ELCON Rehearing Request at 6 (no associated benefits from expanded MOPR); Clean Energy Advocates Rehearing Request at 63.

[335] Clean Energy Associations Rehearing and Clarification Request at 28; Clean Energy Advocates Rehearing Request at 72-74.

[336] Clean Energy Associations Rehearing and Clarification Request at 23.

unknown scope and unreasonable level of mitigation, and that the Commission has failed to carry its burden for these reasons.[337]

136. FES argues that the December 2019 Order is unjust, unreasonable, arbitrary, and capricious because the Commission fails to consider that the expanded MOPR will cause price distortions in the energy and ancillary services markets.[338] Specifically, FES argues that the expanded MOPR will lead to PJM over-procuring capacity and suppress prices in the energy and ancillary services markets. As energy revenues fall, FES contends, market participants will increase their capacity offers commensurately, further inflating capacity prices.[339]

137. Advanced Energy Entities contend that the uncertainty caused by the December 2019 Order is resulting in prices for contracts to purchase renewable energy for customers to increase as much as 33% and deals being delayed or cancelled, potentially causing economic harm to the PJM states.[340] More specifically, they assert that application of the MOPR to demand response, energy efficiency, capacity storage, and "emerging technology" threatens to block these resources from the PJM capacity market; the loss of capacity revenue is likely to cause projects to be delayed or cancelled, and if not, the projects will not be recognized for the capacity value they provide in PJM, limiting competition, increasing costs to consumers, and harming innovation.[341]

138. NEI argues that the Commission has the authority to consider factors outside the direct calculation of rates[342] and has a duty to promote coordination of facilities within PJM's footprint, including the conservation of natural resources.[343]

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[337] OPSI Rehearing and Clarification Request at 8.

[338] FES Rehearing Request at 8; *see also* Pennsylvania Commission Rehearing and Clarification Request at 7-8.

[339] FES Rehearing Request at 16.

[340] Advanced Energy Entities Rehearing and Clarification Request at 3, 6.

[341] *Id*. at 6.

[342] NEI Rehearing Request at 10 (citing *Pub. Utils. Comm'n of Cal. v. FERC*, 367 F.3d 925, 929 (D.C. Cir. 2004) (citing *Permian Basin Area Rate Cases*, 390 U.S. 747, 791 (1968)).

[343] *Id*. at 10 (citing 16 U.S.C. § 824(a)).

### b. Commission Determination

139. We deny rehearing, because "[s]etting a just and reasonable rate necessarily 'involves a balancing of the investor and consumer interests.'"[344] We continue to find the replacement rate, as revised in this rehearing order, strikes the appropriate balance for PJM at this time. The expanded MOPR will protect the "integrity of competition in the wholesale capacity market against unreasonable price distortions and cost shifts" caused by State Subsidies.[345] The replacement rate will enable PJM's capacity market to send price signals on which both investors and consumers can rely to guide the entry and exit of economically-efficient capacity resources.[346] Indeed, the replacement rate will support the capacity market's ability to attract investment in new and existing resources when the system requires it, and to do so at reasonable cost.[347] This, in turn, supports the capacity market's core objective of maintaining resource adequacy at just and reasonable rates, particularly during periods when entry is needed.[348]

140. We disagree that the Commission failed to consider the costs of the replacement rate, and with the argument that a cost-benefit analysis was required in support of the replacement rate.[349] Costs are an important consideration in decision-making, and we do

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[344] *NextEra*, 898 F.2d at 21 (quoting *Wis. Pub. Power Inc. v. FERC*, 493 F.3d 239, 262 (D.C. Cir. 2007) (per curiam) (quoting *Hope Nat. Gas. Co.*, 320 U.S. at 603)).

[345] December 2019 Order, 169 FERC ¶ 61,239 at P 39 & n.86 (quoting June 2018 Order, 163 FERC P 61,226 at P 150); 2011 MOPR Order, 135 FERC P 61,022 at P 141, *aff'd sub nom. NJBPU*, 744 F.3d 97-102.

[346] December 2019 Order, 169 FERC ¶ 61,239 at P 41.

[347] *See* CASPR Order, 162 FERC ¶ 61,205 at PP 72, 75 (finding ISO-NE appropriately focused on ensuring its revisions to the forward capacity market do not undermine its "key function of attracting and sustaining investment when needed.").

[348] *See, e.g.*, *id.* at P 23 (stating that capacity market's objective is to ensure resource adequacy at just and reasonable rates).

[349] *See Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,172, at P 26 (2008) (declining to condition FPA section 205 approval of MISO's proposal to implement a day-ahead and real-time ancillary services market on Commission approval of cost-benefit studies); *Am. Elec. Power Serv. Corp.*, 118 FERC ¶ 61,041, at P 18 n.33 (2007) (noting that a cost-benefit analysis is not required under FPA section 205); *PJM Interconnection L.L.C.*, 155 FERC ¶ 61,157, at P 30 (2016) (explaining why a cost-benefit analysis is not necessary when conditionally accepting the establishment of a new capacity product, a Capacity Performance Resource); *see also Pub. Utils. Comm'n of Cal.*, 367 F.3d at 929 (noting that a primary purpose of the FPA is "to encourage the

not take lightly the concern that these revisions to the PJM capacity market may increase the capacity market costs customers will bear.[350] In determining whether rates are just and reasonable, while the Commission is required to consider all relevant factors and make a "common-sense assessment" that the costs that will be incurred are in accordance with the customers' overall needs and interest, the Commission's findings need not be accompanied by a quantitative cost-benefit analysis.[351] Indeed, parties acknowledge the wide range of cost estimates associated with the replacement rate, based on differing inputs and assumptions,[352] indicating the difficulty inherent in developing a reasonable

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orderly development of plentiful supplies of electricity . . . at reasonable prices" and, to do so, Commission "may consider non-cost factors as well as cost factors in setting rates") (citing *NAACP*, 425 U.S. at 670; *Permian Basin*, 390 U.S. at 791).

[350] June 2018 Order, 163 FERC ¶ 61,236 at P 159; *see also Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1502 (D.C. Cir. 1984) (stating that, while delineating the zone of reasonableness may involve "a complex inquiry into a myriad of factors," nevertheless, "the most useful and reliable starting point for rate regulation is an inquiry into costs").

[351] *Process Gas Consumer Grp. v. FERC*, 866 F.2d 470, 476-77 (D.C. Cir. 1989); *see also Am. Elec. Power Serv. Corp.*, 118 FERC ¶ 61,041 at P 18; *Sw. Power Pool, Inc.*, 116 FERC ¶ 61,289, at P 47 (2006).

[352] *See, e.g.*, Clean Energy Advocates Rehearing Request at 72 & n.208 (citing December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 50 & n.52) ("back-of-the-envelope" calculation yields roughly $2.4 billion per year)); *id.* at 72 & n.209 (citing Ex. A, Goggin Aff. ¶ 3) (estimating redundant capacity from $14 to 24.6 billion over 10 years, costing each of 65 million PJM customers $217-$379)); *id.* at 73 & n.211 (citing Initial Br. of the New Jersey Board of Public Utilities at 5-6 (increase in rest-of-RTO clearing prices of $23.49/MW-day)); *id.* at 74 & n.212 (citing Grid Strategies Report, Docket Nos. EL16-49 and EL18-178, *cited in* Letter from U.S. Senator Charles Schumer et al. to Chairman Chatterjee at 1 (filed Aug. 2019) ($5.6 billion per year); *see also* ELCON Rehearing Request at 7 & n.16 (asserting replacement rate costs could be higher than estimates in the Goggin Aff.). We note that a recent report by the PJM IMM concludes that the cost estimates cited in Commissioner Glick's dissent were significantly overstated. *See* Monitoring Analytics, *Potential Impacts of the MOPR Order*, at 4-5 (Mar. 20, 2020), www.monitoringanalytics.com/reports/Reports/2020/IMM_Potential_Impacts_of_the_MOPR_Order_20200320.pdf (stating that the estimates relied upon by Commissioner Glick were based on four incorrect assumptions, including a substantial overstatement of the quantity of previously-cleared nuclear power plants that receive zero-emission credits as 6,670 MW, which is approximately 2,000 MW above the correct quantity).

estimate of any potential cost increase.[353] The actual cost impacts of the replacement rate are speculative at this point, however, because—among other unknown factors—the MOPR's default offer price floors are not yet determined. While we recognize the replacement rate could increase costs to consumers, particularly the customers in states that have chosen to enact State Subsidies, we nevertheless find the replacement rate is necessary to protect the integrity of the capacity market, which, in turn, ensures that investors will continue to be willing to develop resources to meet current and future reliability needs.[354]

141. We disagree with Consumer Representatives' contention that the Commission over-relies on *NJBPU* to abdicate its obligation to protect consumer interests. On the contrary, the Commission is protecting the consumer interest by ensuring the integrity of the PJM capacity market. And, the Commission appropriately relies on *NJBPU* as an example of judicial affirmation of the Commission's approach in the December 2019 Order. As the *NJBPU* Court declared, "states may use any resource they wish to secure the capacity they need" and explained that even if states' preferred generation resources fail to clear the auction, the states are free to use them anyway.[355] More significantly, while states are "free to make their own decisions regarding how to satisfy their capacity needs," they may not impinge on the Commission's jurisdiction over wholesale rates and they will "appropriately bear the costs of [those] decision[s], including possibly having to pay twice for capacity."[356] Maintaining the integrity of the market supports investor confidence, which in turn ensures investment in resources to meet future reliability needs.[357]

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[353] *See, e.g.*, Clean Energy Advocates Rehearing Request at Ex. A, Goggin Aff. at n.2 ("This cost per customer calculation is not intended to be a precise estimate of what retail customers would pay, which would require detailed modeling of impacts on capacity market clearing prices and a deep examination of how capacity costs are reflected through to retail rates in different states).

[354] *See, e.g.*, *Cent. Hudson*, 783 F.3d at 109 (In concluding that a proposed tariff provisions benefits outweigh its costs, "FERC may permissibly rely on economic theory alone to support its conclusions so long as it has applied the relevant economic principles in a reasonable manner and adequately explained its reasoning."); *Sacramento Mun. Util. Dist. v. FERC*, 616 F.3d 520, 531 (D.C. Cir. 2010).

[355] *NJBPU*, 744 F.3d at 97.

[356] *Id*.

[357] *See* CASPR Order, 162 FERC ¶ 61,205 at P 21 ("Ultimately, the purpose of basing capacity market constructs on these principles is to ensure a level of investor confidence sufficient to ensure resource adequacy and just and reasonable rates."); *see*

142. We reject arguments that the MOPR will somehow set prices above a competitive level, distort prices, or unjustly and unreasonably raise prices. The default offer price floors, as explained in the December 2019 Order, will be set at a competitive level for each resource type.[358] This will ensure that State-Subsidized Resources are not able to offer below their costs and suppress capacity prices. We acknowledge that states may choose to develop and sustain preferred resources regardless of whether they are able to clear the capacity market, and such a choice by states may result in oversupply. However, the decision by certain states to support less economic or uneconomic resources in this manner cannot be permitted to distort pricing in the federally-regulated multi-state wholesale capacity market.[359] We reiterate that our focus here is on ensuring that the capacity market price is reflective of competitive offers.[360] Further, we find that ensuring a just and reasonable capacity market price cannot reasonably be said to distort the prices in related markets. In relation to the proposed resource-specific FRR Alternative discussed *supra* Section G.1, parties erroneously suggest that it would be just and reasonable to allow capacity market prices to be suppressed, through the resource-specific FRR Alternative, to ensure just and reasonable energy and ancillary services prices, despite the fact that the energy and ancillary services market prices have not been found to be unjust or unreasonable. Again, we cannot allow the decisions of certain states to continue to support uneconomic resources to prevent the new entry or continued operation of more economic generating capacity in the federally-regulated multi-state wholesale capacity market. The capacity market is vital because it is the mechanism for ensuring resource adequacy in PJM.[361] Moreover, as we explain immediately below,[362] the Commission is obligated to ensure that the PJM capacity market rates are just and reasonable and not unduly discriminatory. The PJM MOPR, as set forth in the December

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*also id.* at P 22 ("Erosion of investor confidence can prevent the [capacity market] from attracting investment in new and existing non-state supported resources when investment is needed, or can lead to excessive costs for consumers as capacity markets include significant risk premiums in their offers.").

[358] *See infra* Section IV.C; December 2019 Order, 169 FERC ¶ 61,239 at PP 136-156.

[359] December 2019 Order, 169 FERC ¶ 61,239 at P 7.

[360] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 38; December 2019 Order, 169 FERC ¶ 61,239 at P 1; June 2018 Order, 163 FERC ¶ 61,236 at P 1.

[361] *See, e.g.*, December 2019 Order, 169 FERC ¶ 61,239 at P 18; PJM, Intra-PJM Tariffs, OATT, Attach. DD, § 1.

[362] *See infra* P 143.

2019 Order and in today's order, provides a resource-neutral approach to ensuring that market forces, not State Subsidies, determine capacity prices in PJM.

143. Regarding arguments that the prices for contracts for renewable resources are increasing, even if true, parties have provided no evidence that increased prices for those contracts are not just and reasonable. We also reject arguments that the replacement rate is unjust and unreasonable because forcing renewable, demand response, energy efficiency, storage, or emerging technology resources receiving or entitled to receive State Subsidies to justify their competitiveness, or be subject to the default offer price floor, will somehow prevent those resources from participating in the capacity market. While the replacement rate may make it more difficult for State-Subsidized Resources to participate in the market, by nature of that competitive showing, our statutory obligation is to ensure just and reasonable rates, and parties have not presented any evidence that the PJM capacity market will not produce just and reasonable rates unless we allow special exemptions to further the growth of certain resource types.

144. As to Exelon's concern that the Commission has not shown that the replacement rate will provide any concrete reliability benefits to customers because reserve margins are well above the target, we note that developing new competitive resources requires investments and takes time. However, if an ever-increasing amount of State-Subsidized Resources participate in the capacity auctions, they will unreasonably suppress capacity market clearing prices, and investors will be discouraged from developing resources that may be needed in the future. The Commission need not wait until harm has been fully realized before taking action to prevent it.[363]

145. We agree with NEI that the Commission may consider factors besides cost in setting rates.[364] However, we do not agree with NEI's assertion that the Commission must consider conservation of natural resources as one of these factors. The Commission's express statutory authority to set just and reasonable rates does not require consideration of such factors.[365]

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[363] *See Assoc. Gas Distrib. v. FERC*, 824 F.2d 981, 1008 (D.C. Cir. 1987) ("Agencies do not need to conduct experiments in order to rely on the prediction that an unsupported stone will fall. . . ."); *Sacramento Mun. Util. Dist.*, 616 F.3d at 531 ("[no case law] prevents the Commission from making findings based on generic factual predictions derived from economic research and theory") (internal quotations omitted).

[364] *See, e.g.*, *Permian Basin Area Rate Cases*, 390 U.S. at 814-15 (finding the Commission's consideration of non-cost factors is consistent with the terms and purposes of its statutory authority).

[365] *See supra* P 41.

## C. Minimum Offer Price Floors

### 1. Planned Resources

#### a. Requests for Rehearing and Clarification

146. The Pennsylvania Commission argues the Commission erred by not addressing evidence that Net CONE is a poor proxy for the actual cost of new entry.[366] The Pennsylvania Commission states that, during the last five BRAs, 15.9 GW of new combined cycle natural gas-fired resources cleared the auctions, despite the prices being only 64% of the derived combined cycle natural gas-fired default Net CONE.[367] The Pennsylvania Commission contends that this demonstrates PJM overstates Net CONE and that applying the MOPR in this manner would create an unreasonably high barrier to entry for new resources, resulting in the capacity market procuring excess capacity at potentially higher prices.[368] The Pennsylvania Commission states that, based on this evidence, it supported using Net ACR as the default offer price floor for both new and existing resources.[369]

147. Parties assert that default offer price floors should be calculated using the Net ACR method, along with appropriate and accurate inputs.[370] Parties contend that resources will offer into the capacity market at their marginal cost of offering capacity (Net ACR), with the expectation that it will recover its cost of new entry over its lifetime through a combination of capacity, energy, and ancillary service market revenues and should not be required to offer into their first auction at a level sufficient to recover the

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[366] Pennsylvania Commission Rehearing and Clarification Request at 4; s*ee also* OPSI Rehearing and Clarification Request at 7 (arguing even the reference resource Net CONE exceeds the actual cost of new entry).

[367] *Id*. at 4 (citing Pennsylvania Commission Reply Testimony at 16 (filed Nov. 6, 2018)).

[368] *Id*. at 5.

[369] *Id*. at 5-6.

[370] Clean Energy Associations Rehearing and Clarification Request at 47 (citing Clean Energy Industries Reply Testimony at 24-25 (filed Nov. 6, 2018)); Illinois Commission Rehearing Request at 19.

resources' cost of new entry over its life.[371] The Illinois Commission argues that the Commission's decision to establish default offer price floors for new and existing resources based on Net CONE and Net ACR, respectively, will result in over-mitigation, creating non-competitive barriers to entry to new resources.[372]

148. The Illinois Attorney General argues that the expanded MOPR unduly discriminates between new and existing resources by using Net CONE for new resources, especially RPS resources, and Net ACR for existing resources when the record demonstrates that Net ACR is the appropriate MOPR level for any resource.[373] The Illinois Attorney General asserts that Net CONE does not reflect the "true cost" a resource must recover in order to become, or continue to serve as, a capacity resource in PJM.[374] The Illinois Attorney General adds that to the extent Net CONE for new resources produces minimum offers above historical clearing prices, those resources will likely be excluded from the BRA, resulting in undue discrimination against new resources and an unjust and unreasonable preference for existing resources.[375]

149. DC Attorney General argues that, by setting resource-specific high default offer price floors, but exempting nearly all existing resources, the December 2019 Order heavily tips the sale in favor of existing resources and new fossil fuel resources and unduly discriminates against other new resources and demand-side resources.[376] DC Attorney General argues this expanded MOPR will therefore interfere with its RPS program by putting cost-effective new distributed energy resources at a disadvantaged position vis-à-vis existing centralized resources.[377]

150. Parties argue that setting the default offer price floor for new resources at Net CONE is unjust and unreasonable because it would prevent any new renewable

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[371] Clean Energy Advocates Rehearing Request at 66-67 (citing Market Monitor Reply Testimony at 4-5 (filed Nov. 6, 2018); ELCON Reply Testimony at 6 (filed Nov. 6, 2018)); Illinois Commission Rehearing Request at 19.

[372] Illinois Commission Rehearing Request at 19 (citing Market Monitor Reply Testimony at 4 (filed Nov. 6, 2018)).

[373] Illinois Attorney General Rehearing Request at 9.

[374] *Id*. at 10.

[375] *Id*. at 12-13.

[376] DC Attorney General Rehearing Request at 17-19.

[377] *Id*. at 19.

generation from clearing in the capacity auction.[378] AES contends that the expanded MOPR is unjust and unreasonable because the end result is that new renewable resources will only be able to participate meaningfully in the capacity market if they forego other sources of revenue, including RECs, which have been a fundamental part of the market for renewable power for two decades.[379]

151. If the Commission does not exempt new renewable resources, the DC Commission requests the Commission instead set the default offer price floor for new renewable resources at Net ACR to avoid creating a barrier to entry.[380] The DC Commission also argues that the default offer price floors for such resources should be updated annually, as prices may drop significantly year to year.[381] The DC Commission explains that renewable resources currently represent only seven percent of PJM's resource mix, below the national average and other RTOs, and that most PJM states have clean energy policies.[382] Further, the DC Commission believes that lowering the default offer price floor for new renewable resources will reduce the number of unit-specific reviews needed and "align the goals of federal promotion on renewables with state actions."[383]

152. Clean Energy Associations and Clean Energy Advocates assert that applying the Net CONE method to existing resources that have not previously cleared a capacity market auction is contrary to the Commission's finding that "[e]xisting resources face different costs than new resources because the decision to enter the market is different than the decision to remain in the market."[384] Similarly, Consumer Representatives argue that the Commission should grant rehearing such that new and existing State-Subsidized demand response will be subject to a default offer price floor based on an historical average of prior competitive demand response resource cleared offers. Consumer Representatives also argue that it is not clear when resources will be considered new and

[378] AES Rehearing and Clarification Request at 3; New Jersey Board Rehearing and Clarification Request at 34-35; DC Attorney General Rehearing Request at 7 & n.15.

[379] AES Rehearing and Clarification Request at 4.

[380] DC Commission Rehearing and Clarification Request at 8-9.

[381] *Id*. at 8.

[382] *Id*. at 8-9.

[383] *Id*. at 9.

[384] Clean Energy Associations Rehearing and Clarification Request at 46 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 151); Clean Energy Advocates Rehearing Request at 68.

existing, or subject to Net CONE or Net ACR, given that the December 2019 Order defines "existing" so narrowly.[385]

153. The New Jersey Board argues that the December 2019 Order failed to address arguments that the default offer floor price for new resources should be the reference resource Net CONE, as resource type-specific values would prevent some resource types from clearing.[386]

154. Clean Energy Associations argue that the Commission disregarded substantial record evidence demonstrating that Net CONE does not reflect accurate or competitive offers for renewable resources because they rely on long-term power purchase agreements, not the Net CONE methodology, when obtaining financing and have significantly different operational and technological realities, such as no ongoing fuel costs, from the hypothetical natural gas-fired resource upon which the Net CONE method is based.[387]

155. The DC Commission requests clarification as to how the default offer price floor will be established for new demand response programs without behind-the-meter generation.[388] The DC Commission states that it is unclear how the Commission's replacement rate, which proposes to average the last three years' demand response offers, will function for new resources which do not have any previous offers.[389] The DC Commission explains that different programs have different participation rates and parameters, which would make it difficult to use one default offer price floor for every type of demand response and may lead to unnecessary and burdensome unit-specific reviews.[390]

156. Clean Energy Advocates argue the Commission does not justify setting the default offer price floor at 100% of Net CONE rather than 90% of Net CONE.[391]

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[385] Consumer Representatives Rehearing and Clarification Request at 38-40.

[386] New Jersey Board Rehearing and Clarification Request at 34-35.

[387] Clean Energy Associations Rehearing and Clarification Request at 45-46.

[388] DC Commission Rehearing and Clarification Request at 9-10.

[389] *Id*. at 10.

[390] *Id*.

[391] Clean Energy Advocates Rehearing Request at 66.

### b. Commission Determination

157. We deny rehearing. The Commission addressed arguments regarding whether Net CONE was an appropriate default offer price floor for new resources in the December 2019 Order, and we affirm those conclusions here.[392] We also reject arguments that suggest that the default offer price floors, which have not yet been proposed, are somehow inaccurate. These arguments are premature, as the actual values will be submitted as part of the compliance filing. To the extent that parties contend that it is incorrect for the Commission to rely on Net CONE as a proxy for competitive offers from new resources rather than to argue that the current value set for Net CONE is incorrect, then that argument represents a collateral attack upon a legion of prior Commission orders holding that the purpose of capacity markets is to attract and retain sufficient capacity to maintain reliability requirements, and to do so, prices need to average out over time to the cost of new entry.[393] Further, the fact that new natural gas-fired resources have been able to enter the capacity market at a price below the relevant default Net CONE is not evidence that the current Net CONE values are not appropriately calculated. Because Net CONE serves as a proxy for competitive offers from new resources, it is unsurprising—and consistent with the purpose of the MOPR—that the only new natural gas-fired resources that have cleared the capacity market in recent years have been those with costs below those of the reference resource used to set the default offer price floor.

158. We also deny requests for rehearing that argue it is unjust and unreasonable or unduly discriminatory to use different default offer price floors for new and existing resources, or to use Net CONE instead of Net ACR as the default offer price floor for new resources. This does not unduly discriminate against new resources because new resources are not similarly situated to existing resources with regard to the decisions and avoidable costs they face. New and existing resources face different costs "because the decision to enter the market is different than the decision to remain in the market."[394] Net ACR does not account for the cost of constructing a new resource. Using Net ACR as the MOPR value for new resources would not serve the purpose of the MOPR, because it does not reflect new resources' actual costs of entering the market and therefore would not prevent uneconomic State-Subsidized Resources from entering the market.[395] The

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[392] December 2019 Order, 169 FERC ¶ 61,239 at PP 138-142.

[393] *See, e.g.*, *ISO New England Inc.*, 158 FERC ¶ 61,138, at P 52 (2017); *N.Y. Indep. Sys. Operator, Inc.*, 144 FERC ¶ 61,126, at P 26 (2013); *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at P 91 (2006).

[394] December 2019 Order, 169 FERC ¶ 61,239 at P 151.

[395] *Id*. P 140.

MOPR requires State-Subsidized Resources to offer above the floor or provide cost justification to offer below the floor. This does not over-mitigate or disadvantage new resources of any one type relative to existing resources; it merely ensures that all resources are offering competitively.

159. The December 2019 Order acknowledged that using Net CONE as the default offer price floor for new resources may create a barrier to entry for some resources, but found that to be just and reasonable.[396] All other things being equal, new resources should be less likely to clear than many existing resources because they face additional costs that existing resources do not face, including construction and permitting costs.[397] Therefore using Net CONE as the default offer price floor for new resources will ensure that the expanded MOPR achieves its goal and prevents uneconomic new entry from clearing the capacity market as a result of State Subsidies.

160. With respect to arguments that the default offer price floor will prevent new renewable resources from clearing the market, we disagree. The MOPR does not prevent resources from clearing the capacity market. If a State-Subsidized Resource is not able to clear, it is because the resource was not economic absent its State Subsidy. Such resources should not be allowed to clear the capacity market at artificially reduced levels and suppress the clearing price for economic resources. Although the DC Commission argues that lowering the default offer price floor would reduce the number of resources facing unit-specific review, that does not justify allowing State-Subsidized Resources to offer into the auction unmitigated, because it would undermine the entire point of the expanded MOPR. We also reject the DC Commission's request to update the default offer price floors for renewable resources annually. The DC Commission has failed to demonstrate that updating the values with the Commission quadrennially, as PJM already does for the current natural gas MOPR default offer price floors, is insufficient.

161. We also deny requests for rehearing regarding treating resources as new, for the purposes of the MOPR, until they clear an auction. It would not be reasonable to treat resources that fail to clear the capacity market subject to the default offer price floor for new resources as existing resources. An exemption that allows new, State-Subsidized Resources to bypass the MOPR, solely because the MOPR prevents them from clearing, would completely defeat the purpose of the MOPR.[398]

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[396] December 2019 Order, 169 FERC ¶ 61,239 at P 139.

[397] *See, e.g.*, PJM Initial Testimony at 44 (filed Oct. 2, 2018) (explaining that construction and development costs should not be included in the default offer price floor for existing resources).

[398] December 2019 Order, 169 FERC ¶ 61,239 at P 141.

162. With respect to New Jersey Board's contention that the Commission failed to address arguments that the default offer price floor for new resources should be Net CONE for the reference unit, as opposed to resource-specific values, we disagree. As we found in the December 2019 Order, resources of different types compete against each other in a single capacity market, and it would undermine the effectiveness of the expanded MOPR to subject resources with varying going-forward costs to the same default offer price floor.[399] The purpose of the expanded MOPR is to ensure that State-Subsidized Resources are offering competitively. Determining whether offers are competitive relative to a default offer from that resource type is more accurate than doing so relative to the reference resource. Further, as explained above, the MOPR will not unjustly and unreasonably prevent resources from clearing – they fail to clear only if they are not economic absent the State Subsidy. Those resources should not clear the capacity market.

163. Clean Energy Associations argue that the Commission disregarded substantial record evidence demonstrating that Net CONE does not reflect accurate or competitive offers for renewable resources because such resources rely on long-term power purchase agreements. Clean Energy Associations argue that resources that do not rely on capacity market revenues should not face the same default offer price floor as resources that do. However, this argument goes against the foundations of both the June 2018 Order and the December 2019 Order. The purpose of these orders is to protect the "integrity of competition in the wholesale capacity market"[400] by ensuring resources offer competitively. Relying on power purchase agreements does not, in any way, change the cost of building the resource. It may change the revenue that resource receives, but, should the supplier choose to accept a State Subsidy for that resource, the supplier would be free to account for any voluntary, arm's length bilateral transactions in its request for unit-specific review. We find no reason to grant special treatment to resources that rely on permissible out-of-market revenue.

164. With respect to the DC Commission's request regarding clarification as to how the default offer price floor will be established for new curtailment-based demand response programs, the DC Commission has misunderstood the December 2019 Order. The December 2019 Order found that PJM's proposed default offer price floor approach, which would average the last three years' demand response offers to determine the default offer price floor value for resources that have not previously cleared as capacity, was just and reasonable for curtailment-based demand response resources. This average should not consist of a single resource's offers, as the DC Commission seems to understand, but rather should include all curtailment-based demand response resource

[399] *Id*. P 157.

[400] *Id*. P 38; June 2018 Order, 163 FERC ¶ 61,226 at P 150.

offers in the last three BRAs.[401] We acknowledge there may be significant variation in demand response programs, but, because the average should include all curtailment-based demand response offers, we find this is a just and reasonable method for determining a default offer price floor. Resources that do not wish to be mitigated to the default offer price floor may request a Unit-Specific Exemption or certify to PJM that they will forego any State Subsidy under the Competitive Exemption.

165. Finally, we disagree with parties who argue that the December 2019 Order did not justify the change from 90% to 100% of Net CONE. The December 2019 Order found that a purpose of the MOPR is to ensure resources are offering competitively and that requiring new resources to offer at 100% of the default Net CONE, unless they are able to justify a lower Net CONE value through the Unit-Specific Exemption, is a just and reasonable method of accomplishing this goal.[402] Given the Competitive and Unit-Specific Exemptions, as well as the resource type-specific default offer price floor, we find that the 10% safe harbor is no longer necessary to balance the need to prevent uneconomic entry the administrative burden of unit-specific review.

### 2. Existing Resources

#### a. Requests for Rehearing and Clarification

166. The Market Monitor requests rehearing or clarification regarding the December 2019 Order's direction to use zonal average net revenues to calculate default offer price floors for existing resources. The Market Monitor explains that PJM only proposed to do so for new resources but proposed to continue to calculate default offer price floors for existing resources using actual unit-specific net revenues. The Market Monitor contends that it has used actual unit-specific net revenues with default gross ACR values for calculating default Net ACR values since the capacity market was introduced. Therefore, the Market Monitor requests clarification that zonal net revenues should only be used for calculating default offer price floors for new resources, and unit-specific net revenues should be used for calculating default offer price floors for existing resources.[403]

167. Consumer Representatives request clarification that, in exempting demand resources that have previously cleared a capacity auction, the Commission considers the demand resource existing if it cleared a capacity auction, regardless of the number of

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[401] December 2019 Order, 169 FERC ¶ 61,239 at P 145.

[402] *Id*. P 138.

[403] Market Monitor First Clarification Request at 4.

MWs that cleared the auction.[404] Consumer Representatives explain this is necessary because the value of the curtailment that a demand response resource may offer into PJM's capacity market is dependent on the customer's peak load contribution value, which is based on the customer's peak consumption during the prior year.[405]

168. Consumer Representatives also request clarification that once a demand resource qualifies for the exemption, it retains the exemption notwithstanding any changes to its capacity rating or the level of State Subsidy that it receives.[406]

169. Exelon asks the Commission to clarify that the assumption of a 20-year asset life in calculating offer price floor values concerns only new generation resources, and is not intended to apply to the net ACR for existing resources.[407] Exelon argues that applying a 20 year asset life to existing resources would be illogical and unsupported by evidence, as many of these resources are over 20 years old but not nearing retirement, and contradictory to PJM's longstanding practice for setting Net ACR for offer caps by depreciating ongoing capital expenditures over a lifetime depending on the age of the resource. Specifically, Exelon explains that PJM uses a methodology known as Avoidable Project Investment Recovery Rate.[408]

170. The DC Commission requests clarification regarding why the December 2019 Order directs PJM to justify their proposed zero default offer price floor for existing renewable resources, but also exempts existing renewable resources.[409]

### b. <u>Commission Determination</u>

171. We grant the Market Monitor's request for clarification and find that zonal net revenues may only be used for calculating default offer price floors for new capacity, and that resource-specific net revenues should be used for calculating default net ACR values for existing resources.

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[404] Consumer Representatives Rehearing and Clarification Request at 41-42.

[405] *Id*. at 42 n.128.

[406] *Id*. at 42.

[407] Exelon Rehearing and Clarification Request at 32-33 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 153).

[408] *Id*. (citing PJM OATT, Attach. DD, § 6.8(a)).

[409] DC Commission Rehearing and Clarification Request at 7 n.24.

172. We deny Consumer Representatives' requested clarification that demand response resource should be considered existing if they have previously cleared an auction, regardless of how many MWs they cleared. The December 2019 Order finds that any uprates (i.e., incremental increases in the capability of existing resources) of any size are considered new for purposes of applying the MOPR because uprates may come with additional avoidable costs, such as construction costs, that existing resources otherwise do not face.[410] Therefore, we find that demand response resources increasing the number of MWs they offer year-to-year must explain why the increased quantity they intend to offer is not connected to any increased costs or State Subsidies that make the uprate possible.[411]

173. We grant Exelon's request for clarification that PJM should not necessarily use 20-years as the default depreciation period when including capital expenditures in setting unit-specific offer floors for existing resources. When conducting unit-specific review, PJM and the Market Monitor may accept the depreciation period that reflects the unit's age similar to the Avoidable Project Investment Recovery Rate method used to depreciate ongoing capital expenditures over a lifetime depending on the age of existing resources.

174. With respect to the DC Commission's request for clarification regarding existing renewable resources, we reiterate that the December 2019 Order exempted certain existing renewable resources receiving support from state-mandated or state-sponsored RPS programs.[412] This exemption was limited to resources that fulfilled at least one of these criteria: (1) successfully cleared an annual or incremental capacity auction prior to the December 2019 Order; (2) had an executed interconnection construction service agreement on or before the date of the December 2019 Order; or (3) had an unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of the December 2019 Order.[413] The exemption did *not* apply to renewable resources in perpetuity – any renewable resource receiving a State Subsidy that does not meet the conditions of the exemption will be subject to the MOPR as a new resource in the next capacity auction in which it participates unless it qualifies for another exemption. Should such a resource clear the capacity auction, it will be considered existing,[414] and subject to the MOPR as an existing resource unless it qualifies

[410] December 2019 Order, 169 FERC ¶ 61,239 at P 149.

[411] *See id*.

[412] *See id*. P 173.

[413] *Id*.

[414] *Id*. P 2 n.5.

for another exemption. Only renewable resources meeting the criteria for the RPS Exemption as of the date of the December 2019 Order will be exempt.

### 3. Both Planned and Existing

#### a. Requests for Rehearing and Clarification

175. Parties assert that the Commission erred by subjecting behind-the-meter generation to the same Net CONE and/or Net ACR as front-of-the-meter generation. Parties argue that the December 2019 Order assumes, without evidence, that behind-the-meter generation is not similarly situated to generation in front-of-the-meter or merchant generation because the primary purpose of behind-the-meter generation is not sales into wholesale markets.[415] Advanced Energy Entities argue that behind-the-meter generators may have been adopted for other purposes.[416] Similarly, Consumer Representatives explain that, while the gross CONE for a new type of cogeneration equipment may be discernible, the netting approach – in order to be valid – will need to ascribe some value to the steam that is produced by the cogenerator.[417] Consumer Representatives argue that the Commission should grant rehearing and order PJM to use the average of actual, cleared competitive offers from demand resources that did not receive a State Subsidy for both behind-the-meter demand resources and non-behind-the-meter demand resource.[418]

176. Advanced Energy Entities argue that the December 2019 Order presumes, without evidence, that demand response resources with a behind-the-meter generator utilize that generator as a full substitute for their wholesale market purchases.[419] Advanced Energy Entities explain that not all demand response resources can shift their energy demands fully to their on-site generator.[420] Advanced Energy Entities therefore conclude that Net

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[415] Advanced Energy Entities Rehearing and Clarification Request at 5, 22-24; Consumer Representatives Rehearing and Clarification Request at 35-36.

[416] Advanced Energy Entities Rehearing and Clarification Request at 22-23.

[417] Consumer Representatives Rehearing and Clarification Request at 36.

[418] *Id*. at 37-38.

[419] Advanced Energy Entities Rehearing and Clarification Request at 5, 22-24; *see also* Consumer Representatives Rehearing and Clarification Request at 35-36 (arguing that behind-the-meter generation is not similarly situated because the primary purpose is not sales into wholesale markets).

[420] Advanced Energy Entities Rehearing and Clarification Request at 22-23.

CONE is not an accurate representation of an economic offer for these resources.[421] Advanced Energy Entities further argue that the Commission should recognize that behind-the-meter resources have different potential revenue streams and avoided costs than typical front-of-the-meter resources.[422]

177. Consumer Representatives asks the Commission to clarify or explain how "lost manufacturing" should be measured and calculated in the context of demand resources and, given the difficulties in identifying lost manufacturing value, argues the Commission should not require the inclusion of lost manufacturing value in capacity market offers or in considering requests for the Unit-Specific Exemption of demand resources.[423]

178. Clean Energy Advocates argue that the December 2019 Order directs PJM to develop offer floors for demand resources without considering that some services, such as process steam production, may have calculable market values, while other services, such as human safety, continuity of business, and peace of mind from backup power, may not be easily calculable.[424]

179. To the extent that the Commission does not grant rehearing to exempt resources whose primary purpose is not energy production from the MOPR, PJM seeks rehearing of the requirement to provide Net CONE and Net ACR for these resources by March 18, 2020. PJM states that it has little experience with the costs of such resources. PJM requests that the Commission permit PJM to defer development of applicable default offer price floors until PJM has acquired sufficient experience with such resources' costs and require such resources to use the Unit-Specific Exemption, to the extent necessary, in the meantime.[425] Similarly, the Market Monitor requests rehearing as to whether PJM should develop default offer price floors for less commonly used fuel types, or require unit-specific review for such resources. The Market Monitor argues there is not adequate

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[421] *Id*. at 23.

[422] *Id*.

[423] Consumer Representatives Rehearing and Clarification Request at 40-41 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 13).

[424] Clean Energy Associations Rehearing and Clarification Request at 52.

[425] PJM Rehearing and Clarification Request at 19-20 (noting that 12 resources currently participate in the capacity market, with two in the queue).

sample data to calculate a reasonable default Net ACR and Net CONE values for these resource types.[426]

180. The Illinois Commission avers that a logical MOPR floor price would be the price at which a resource would have offered into PJM's capacity auction absent the effect of state policy and that the default offer price floor values should therefore be based on the impact of state policies on offers, rather than Net CONE or Net ACR.[427] The Illinois Commission clarifies that State-Subsidized Resources should only be subject to mitigation under the expanded MOPR if the state policy has one of two effects: (1) changes a resource's offer from extra-marginal to marginal or inframarginal or (2) changes a resource's offer from being marginal to inframarginal.[428] The Illinois Commission states that using Net CONE/Net ACR is illogical and will result in counter-productive outcomes by disqualifying resources with low costs unrelated to state policy from clearing in capacity auctions, thereby reducing efficient competition and unjustly and unreasonably raising costs to consumers.[429] The Illinois Commission argues that using Net CONE and Net ACR as the default offer price floors will also result in over-mitigation because it prohibits downward pressure on offers by being overly precise about costs and revenues, such that unsubsidized resources are able to offer within a range of reasonable offers but State-Subsidized Resources are not.[430]

181. The Illinois Commission argues that if the expanded MOPR remains in place, then the MOPR rules should permit all non-PJM market revenue that does not derive from state policy to be subtracted off the gross CONE or gross ACR calculations. If they are not subtracted, the Illinois Commission maintains, then permissible non-PJM market revenues will be treated no differently than the state policy revenues that the Commission now deems impermissible, resulting in over-mitigation.[431] AEMA requests clarification that reliability value or retail rate savings should also be included in the default offer price floors for demand response and energy efficiency resources.[432]

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[426] Market Monitor First Clarification Request at 5.

[427] Illinois Commission Rehearing Request at 13.

[428] *Id*. at 13 n.48.

[429] *Id*. at 14.

[430] *Id*. at 15.

[431] *Id*. at 16.

[432] AEMA Clarification Request at 4.

182. The Illinois Commission states that the Commission did not address the absurdity of setting a default offer price floor higher than the cap for supplier-side market power mitigation.[433] The Illinois Commission argues that in this scenario it is possible for the offer floor to exceed the allowable offer cap, resulting in an impermeable barrier to market participation. The Illinois Commission argues the default offer price floors should be capped at the offer price ceiling, or the vertical intercept of the Variable Resource Requirement Curve,[434] whichever is lower.[435]

183. In the event that the Commission denies PJM's rehearing request to exempt energy efficiency resources from the MOPR, PJM requests that the Commission clarify the meaning of "verifiable level of savings" for determining the applicable default offer price floor for energy efficiency resources. PJM asserts that it is unclear why such price should be based on the savings from energy efficiency as opposed to the costs of installing energy efficiency resources. PJM also seeks clarification as to whether this approach applies to the default offer price floor or unit-specific offers for energy efficiency resources, since verifiable savings seemingly refers to specific energy efficiency registrations.[436] Further, PJM states that, since it is unable to verify any savings for energy efficiency during the offer period, because such resources are not yet installed, it is unclear whether the December 2019 Order contemplates that the energy efficiency plan should include a generic calculation to show energy efficiency savings in other installations or whether a verifiable level of savings could be demonstrated by, for example, post installation measurement and verification submitted for the energy efficiency resource for the prior delivery year.[437]

184. Advanced Energy Entities argue that the Commission has not explained how objective measurement and verifiable savings should be used to establish a default offer price floor for energy efficiency. Further, Advanced Energy Entities contend that PJM

[433] Illinois Commission Rehearing Request at 17 (citing PJM OATT, Attach. DD, § 6.4).

[434] The Variable Resource Requirement Curve refers to a series of maximum prices that can be cleared in a BRA for unforced capacity, corresponding to a series of varying resource requirements based on varying installed reserve margins and for certain locational deliverability areas. PJM OATT, Definitions – T-U-V, § I.1 (defining Variable Resource Requirement Curve).

[435] *Id*. at 18.

[436] PJM Rehearing and Clarification Request at 26.

[437] *Id*.

already has rules limiting energy efficiency offers to the objective and verifiable savings, which are not at issue in this proceeding.[438]

185. CPower/LS Power argue that the Commission should set the default offer price floor for energy efficiency resources at $0/MW-Day or direct PJM to develop different default offer price floors for common types of energy efficiency projects.[439] CPower/LS Power argue that this would minimize the administrative burden of assessing savings for individual projects. CPower/LS Power assert that since energy efficiency is only included in the capacity market for up to four years, the administrative burden is even more substantial compared to other resources with longer lifespans. CPower/LS Power contend that the default offer floors for most energy efficiency resource types would be $0/MW-Day.[440] Similarly, Advanced Energy Entities contend that the Commission failed to address concerns that the various business models make it impossible to develop appropriate offer floors for seasonal resources, and did not explain what an appropriate default offer price floor for seasonal resources would be.[441] The Market Monitor requests clarification that the assumed savings approach is not an objective measurement and verification method and cannot be the basis for a verifiable level of savings with respect to energy efficiency resources.[442]

186. Advanced Energy Entities contend that the Commission fails to provide sufficient explanation of how default offer floor prices should be calculated for storage, energy efficiency, and additional technologies, arguing that the lack of guidance renders the replacement rate unjust and unreasonable.[443]

**b. <u>Commission Determination</u>**

187. We deny requests for rehearing on the basis that behind-the-meter generators, which may be in every other way identical to their counterparts in-front-of-the-meter,

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[438] Advanced Energy Entities Rehearing and Clarification Request at 14-15.

[439] CPower/LS Power Rehearing and Clarification Request at 7-10.

[440] *Id*. at 9-10.

[441] Advanced Energy Entities Rehearing and Clarification Request at 12-15.

[442] Market Monitor First Clarification Request at 6-7 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 147). The Market Monitor states that more than 87% of energy efficiency resources in the capacity market use assumed savings as the measurement and verification method. *Id*. at 7.

[443] Advanced Energy Entities Rehearing and Clarification Request at 18, 25-26.

should receive special treatment because they may serve a different purpose. Regardless of purpose, if those resources choose to participate in the capacity market and gain the benefits of it by receiving capacity market revenue, then those resources must abide by the generally applicable rules established for the capacity market. Parties have not presented any evidence why a specific type of generator should have fundamentally different going-forward or construction costs depending on whether it exists behind- or in-front-of-the meter. The December 2019 Order already rejected similar arguments, finding that the purpose and type of resource is immaterial if the resource receives a State Subsidy and thus has the ability to suppress capacity prices.[444] The December 2019 Order subjects all State-Subsidized Resources of the same technology type to the same default offer price floor, precisely because they are *of the same technology type*. They should face similar construction and going-forward costs, regardless of the purpose for which they are used, and therefore it is just and reasonable to use the same default offer price floor.

188. With regard to Advanced Energy Entities' argument that behind-the-meter generation is not a full substitute for wholesale market purchases, the December 2019 Order did not find that it was. Advanced Energy Entities seem to be suggesting that demand response resources backed by behind-the-meter generation are basing their offers on a combination of behind-the-meter generation and reduced consumption, and therefore that a default offer price floor based on the generator is not appropriate. We reiterate that the December 2019 Order found that different default offer price floors should apply to demand response backed by behind-the-meter generation and demand response backed by reduced consumption (i.e., curtailment-based demand response programs).[445] However, the extent to which a generator-backed demand response resource includes some estimate of reduced consumption is immaterial: if a generation-backed resource receives a State Subsidy, then that resource is subject to the applicable MOPR for its resource type.[446] Finally, with regard to Advanced Energy Entities' argument that behind-the-meter generators may have additional revenue streams which are not State Subsidies, we reiterate that the December 2019 Order "is not intended to cover every form of state financial assistance that might indirectly affect FERC-jurisdictional rates or transactions; nor is it intended to address other commercial externalities or opportunities

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[444] December 2019 Order, 169 FERC ¶ 61,239 at P 51.

[445] *See id.* P 13 (Net CONE for new demand response resources); *id.* at PP 148-150 (Net ACR for existing demand response resources).

[446] *See id*. P 54 ("We therefore find that the expanded MOPR should apply to energy efficiency resources, as well as demand response, when either of those types of resources receive or is entitled to receive a State Subsidy, unless they qualify for one of the exemptions described in this order.").

that might affect the economics of a particular resource."[447] The December 2019 Order does not, therefore, implicate any revenue streams that do not meet the definition of State Subsidy.

189. With respect to Consumer Representatives' request for clarification as to "lost manufacturing," we clarify that the December 2019 Order did not require PJM to include such costs in a unit-specific review of demand response resources. Rather, the December 2019 Order states that PJM *may* need to evaluate such costs.[448] Similarly, we did not prescribe a specific way of calculating lost manufacturing value and we decline to do so here as well. We will review PJM's proposal on compliance and make a determination at that time.

190. We also reject Clean Energy Advocates argument that the Commission should have considered that the value of some of the services provided by demand response may not be easily calculable. Clean Energy Advocates suggests that demand response resource offers should be based on something other than their costs, but we disagree. The capacity market ensures resource adequacy by setting a price, based on supply and demand, which serves as a signal to guide resource entry and exit. Resource offers should reflect their costs, to ensure the signals are accurate.

191. Though, as discussed above, we deny PJM's request for rehearing regarding exempting resources whose primary purpose is not energy production from the MOPR, we grant PJM's request for rehearing regarding the requirement for PJM to provide a default Net CONE and Net ACR for these resources. Given that PJM has stated it does not have the necessary information to develop default values, we find it just and reasonable to instead require any such resources receiving State Subsidies to request a Unit-Specific Exemption and justify their Net CONE or Net ACR, as appropriate, through the review process.

192. With regard to the Illinois Commission's request for rehearing to base the default offer price floors on the impact of the state policy, rather than the costs of the resource, we find that the Unit-Specific Exemption achieves this aim. However, as discussed above, in Section IV.B.4 (Definition of State Subsidy) we decline to limit the applicability of the MOPR through an impact test. Requiring resources to offer competitively will not, as the Illinois Commission claims, prevent low-cost resources from clearing the market. Rather, resources facing truly low costs, independently of their State Subsidies, may request a Unit-Specific Exemption. The Illinois Commission appears to be suggesting that suppliers will offer resources in the capacity market below their costs, at a loss, absent State Subsidies to allow them to recover that loss. However,

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[447] *Id*. P 68.

[448] *Id*. P 13.

there is no evidence on the record to suggest suppliers are likely to operate counter to their economic interests and economic theory in this manner. We also reject arguments that the replacement rate is unjust and unreasonable because it does not allow State-Subsidized Resources to offer within a range of reasonableness. Again, the Unit-Specific Exemption is available to resources to demonstrate that the default offer price floor does not reflect their costs. We expect there to be some flexibility involved in that option. However, the purpose of the expanded MOPR is to prevent State-Subsidized Resources from offering below their costs, and therefore it is just and reasonable that such resources must offer within a more limited range than unsubsidized resources.

193. We clarify that permissible out-of-market revenues may continue to be incorporated during unit-specific review. The December 2019 Order only concerned revenues meeting the definition of State Subsidies and found only that those revenues may not be included in the unit-specific review. AEMA's request for clarification regarding whether specific examples of avoided costs should be included in the default offer price floors are premature and should be dealt with on compliance.

194. We acknowledge that it is theoretically possible that some default offer price floors may be higher than the default offer cap. However, we reject the Illinois Commissions' arguments that this undermines the December 2019 Order's conclusions. On the contrary, it is possible that certain resource types may be so expensive that they are not competitive. This is the nature of the market – lower cost, competitive resources will be chosen at the expense of more expensive resources. Further, the default offer price floors and the default offer cap serve different functions and are designed to protect the market against different types of uncompetitive behavior, so it is not unreasonable that there may not always be a safe-harbor price range within which offers are presumed to be competitive for State-Subsidized Resources. Finally, we reiterate that the Unit-Specific Exemption remains an option for any seller that believes the default offer price floor does not accurately reflect its costs. We also acknowledge that it is possible that the default offer price floors for some resource types may be in excess of the top of the demand curve (i.e., the Variable Resource Requirement curve). However, we fully addressed this concern in the December 2019 Order.[449] We reiterate that it is appropriate to use a resource-type-specific default offer price floor that reasonably reflects a competitive offer for each resource type, regardless of whether that resource type is so uneconomic as to result in a default offer price floor above the demand curve starting price.

195. We reject arguments that certain types of State-Subsidized Resources should be exempt from the MOPR on the basis that there is variety in business models, cost structures, technologies, or state programs. Further, we reject CPower/LS Power's arguments regarding establishing various default offer price floors for different types of

[449] *Id*. P 142.

energy efficiency as unnecessary. All resource types have multiple forms with varying costs; neither energy efficiency nor seasonal resources are unique in that aspect and therefore we so no reason to mandate PJM treat such resources differently. Energy efficiency and seasonal resources that do not believe the default offer price floor reflects their costs may seek a Unit-Specific Exemption. While the December 2019 Order did not expressly require PJM to propose default offer price floors for seasonal resources on compliance, the order did direct PJM to "propose default offer floor prices for all other types of resources that participate in the capacity market," which would include seasonal capacity resources.[450]

196. We deny Advanced Energy Entities' request for rehearing that the December 2019 Order did not provide sufficient guidance on the default offer price floors for storage and additional technologies. The December 2019 Order directed PJM to propose default offer price floor methodologies for those resource types on compliance, at which time the Commission will evaluate them. We decline to prejudge that proposal here. We also find that that Advanced Energy Entities' request regarding energy efficiency is moot, because we grant rehearing to change the default offer price floors for energy efficiency.

197. We grant rehearing to set the default offer price floor for new energy efficiency resources at Net CONE and existing energy efficiency resources at Net ACR, as discussed below. Upon further consideration, including consideration of PJM's assertions that it is not clear how to calculate the default offer price floors based on verifiable savings and the fact that those savings cannot be verified for new resources until the resource is in operation, we find the default offer price floor for energy efficiency must be based on the costs of installing and maintaining energy efficiency resources, similar to how the default offer price floors for most other resource types are determined.[451] The default offer price floors for energy efficiency must account for the costs of measurement and verification necessary to establish a resource's verifiable level of savings.[452] This will ensure that State-Subsidized energy efficiency resources offer competitively in the capacity market, consistent with their costs absent the State Subsidy. These must be default offer price floors, generally applicable to all new or existing energy efficiency resources, as appropriate, but we clarify that energy efficiency

[450] *Id*. P 146.

[451] PJM Rehearing and Clarification Request at 26. The Commission is concerned that there may be a point where energy efficiency is unable to supply capacity when needed to maintain system reliability. However, that issue can be pursued in a separate proceeding.

[452] *See* Market Monitor First Clarification Request at 6-7 (requesting the Commission clarify that the assumed savings approach is not an objective measurement and verification method and is not the basis for a verifiable level of savings).

resources may also request the Unit-Specific Exemption to verify a Net CONE or Net ACR value lower than the default. We direct PJM to submit a compliance filing within 45 days of issuance of this order proposing Tariff revisions to set the default offer price floor for new energy efficiency resources at Net CONE and existing energy efficiency resources at Net ACR.

## D. Expanded MOPR Exemptions

### 1. Qualification for Self-Supply, RPS, and Demand Response, Energy Efficiency, and Capacity Storage Exemptions

#### a. Requests for Rehearing or Clarification

198. PJM asks the Commission to clarify that resources with any type of interconnection service agreement executed as of December 19, 2019, or unexecuted and filed with the Commission by that date, should be considered existing for the purposes of the exemptions, because not all resources require an interconnection construction service agreement, but all resources must have an interconnection service agreement. PJM explains that interconnection construction service agreements are only required to the extent that network upgrades are required to accommodate the interconnection. PJM also states that there are other types of interconnection service agreements, such as Wholesale Market Participation Agreements, which allow resources interconnected to non-jurisdictional facilities to participate in PJM's markets.[453] Dominion argues that Wholesale Market Participation Agreements grant capacity interconnection rights and are therefore functionally equivalent to interconnection service agreements.[454]

[453] PJM Rehearing and Clarification Request at 21-22; Consumer Representatives Rehearing and Clarification Request at 34-35; *see also* Clean Energy Associations Rehearing and Clarification Request at 52-54 (arguing that any renewable resource that had an interim interconnection service agreement, or its non-Commission jurisdictional equivalent, whether executed or filed unexecuted, as of December 19, 2019 should be eligible for the RPS Exemption because such agreements bind the interconnection customer to all costs incurred for the construction activities being advanced pursuant to the terms of the PJM Tariff); Public Power Entities Rehearing and Clarification Request at 55-56; Dominion Rehearing and Clarification Request at 9, 21 (arguing Wholesale Market Participant Agreements should be included); Consumer Representatives Rehearing and Clarification Request at 34-35 (arguing Wholesale Market Participant Agreements should be included); New Jersey Board Rehearing Request at 49 (arguing resources with capacity interconnection rights should be exempt).

[454] Dominion Rehearing and Clarification Request at 21.

199. Dominion explains that it has units planned in its state-filed integrated resource plan that are desired as part of the Commonwealth of Virginia's plan for its resource portfolio for years beyond 2020.[455] Dominion notes that it does not yet possess unexecuted interconnection construction service agreements for these resources, but that they are planned resources. Dominion argues that not exempting them ignores the planning horizons of load-serving entities.[456]

**b. Commission Determination**

200. The December 2019 Order extended the RPS Exemption, Demand Response, Energy Efficiency, and Capacity Storage Resource Exemption, and Self-Supply Exemption to resources that fulfill at least one of these criteria: (1) has successfully cleared an annual or incremental capacity auction prior to the date of the December 2019 Order; (2) has an executed interconnection construction service agreement on or before the date of the December 2019 Order; or (3) has an unexecuted interconnection construction service agreement filed by PJM for the resource with the Commission on or before the date of the December 2019 Order.[457]

201. We grant rehearing to amend the second and third criteria to include interconnection service agreements, interim interconnection service agreements, and Wholesale Market Participant Agreements, as well as interconnection construction service agreements. The December 2019 Order made clear that the intent of the categorical exemptions was that "most existing resources that have already cleared a capacity auction, particularly those resources the Commission has affirmatively exempted in prior orders, will continue to be exempt from review."[458] The categorical exemptions were designed so as to not unduly disrupt established investment decisions. To that end, the December 2019 Order allowed that these categorical exemptions would also apply to a limited category of resources that may not have cleared a capacity auction yet but are far enough along in the interconnection process to have demonstratively committed to build and/or interconnect.

202. The interconnection agreement stage is the culmination of the interconnection queue process. Interconnection service agreements, interconnection construction service agreements, interim interconnection service agreements, and Wholesale Market Participant Agreements all address the final stages of interconnecting to the PJM system,

[455] *Id*. at 15.

[456] *Id*.

[457] December 2019 Order, 169 FERC ¶ 61,239 at PP 173, 202, 208.

[458] *Id*. P 2.

including conferring interconnection rights and creating binding obligations to fund construction of interconnection facilities.[459] Resources that have not reached this stage of the interconnection process are not sufficiently advanced in the development process to warrant one of the categorical exemptions, because such resources do not have a capacity service obligation, interconnection rights, or an obligation to build the resource.

203. We therefore grant rehearing to expand eligibility for the categorical exemptions to resources that: (1) have successfully cleared an annual or incremental capacity auction prior to the date of the December 2019 Order; (2) have an executed *interconnection service agreement, interim interconnection service agreement,* interconnection construction service agreement, *or Wholesale Market Participation Agreement* on or before the date of the December 2019 Order; or (3) have an unexecuted *interconnection service agreement, interim interconnection service agreement,* interconnection construction service agreement, *or Wholesale Market Participation Agreement* filed by PJM for the resource with the Commission on or before the date of the December 2019 Order. We direct PJM to submit a compliance filing within 45 days of issuance of this order proposing Tariff revisions consistent with this determination.

204. We reject Dominion's request to expand eligibility for the Self-Supply Exemption to any resource that is considered planned under a self-supply entity's integrated resource plan. Integrated resource plans do not replace the PJM interconnection process; granting rehearing in this manner would expand the number of resources eligible for the exemption beyond those that reflect established investment decisions, to include resources that may not even be sufficiently developed to be in the PJM interconnection process at all. We find that the demarcation clarified above is sufficient to recognize those resources that are sufficiently along in the interconnection process to warrant exemption under the Commission's stated goals.

### 2. <u>Self-Supply Exemption</u>

#### a. <u>Rehearing and Clarification Requests</u>

205. Parties argue that the December 2019 Order did not explain why the self-supply business model should be considered a State Subsidy.[460] NCEMC states that there is no evidence to justify finding that rural electric cooperatives' self-supply resources receive

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[459] *See generally* PJM OATT, § VI.

[460] IMEA Rehearing and Clarification Request at 9-11; NRECA/EKPC Clarification and Rehearing Request at 25-31; NCEMC Clarification and Rehearing Request at 15-16; ELCON Rehearing Request at 10 (arguing the December 2019 Order does not justify the change to require self-supply entities to offer at minimum levels reflecting "capital costs of other types of commercial entities.").

subsidies stemming from state action.[461] NCEMC explains that the fact that a rural electric cooperative's self-supply may be funded by revenues received by its distribution cooperative members from their retail customers under their vertically integrated business model structures does not mean that these self-supply resources are receiving a State Subsidy. Instead, NCEMC argues, it demonstrates that the out-of-market revenues received from a generation and transmission cooperative's distribution cooperative retail members that support the generation and transmission electric cooperative self-supply are received in lieu of, not as a supplement to, PJM capacity market revenues.[462] NCEMC states that, while these revenues may be received from "out-of-market" sources, they are fundamentally different from out-of-market revenues authorized by state utility commissions to supplement the revenues that certain renewable and uneconomic coal and nuclear resources receive from their participation in the PJM market.[463]

206. NRECA/EKPC state that the long-term power supply agreements between a generation and transmission electric cooperative and its members, which provide the revenue for its resources, are not based on or entitled to any state financial benefits and do not typically mandate use or support for particular resources.[464] NRECA/EKPC contend that long term supply arrangements and voluntary bilateral contracts entered into by electric cooperatives are not provided by nor required by states, do not necessarily support entry or continued operation of preferred generation resources, and are not directed at or tethered to continued operation or new entry of generating capacity in the capacity market.[465] NRECA/EKPC argue the December 2019 Order is arbitrary and capricious for expanding the scope of this proceeding to include electric cooperative self-supply transactions as State Subsidies subject to the expanded MOPR because the June 2018 and December 2019 Orders focused on state subsidies without explaining how out-of-market payments provided by states connect to an "electric cooperative formed pursuant to state law."[466] Referencing the Commission's stated intent of the State

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[461] NCEMC Clarification and Rehearing Request at 4.

[462] *Id*. at 5-6.

[463] *Id*. at 6.

[464] NRECA/EKPC Clarification and Rehearing Request at 18.

[465] *Id*. at 45.

[466] *Id*. at 17-20, 42-47; *see also* NCEMC Clarification and Rehearing Request at 5-6 (the action of a rural electric cooperative submitting self-supply offers into the PJM capacity market is not a state or state-sponsored action, is completely unrelated to the type of state subsidies that are the subject of this proceeding, and is not used to obtain net revenues from the capacity market).

Subsidy definition, to focus on state out-of-market support that "support[s] the entry or continued operation of preferred generation resources that may not otherwise be able to succeed in a competitive wholesale capacity market," NRECA/EKPC ask that the Commission clarify that "electric cooperative agreements which are free from financial benefits provided or required by a state or states, for the purpose of new entry or continued operation of generating capacity" are not within the definition of State Subsidy.[467]

207. Similarly, IMEA states that the Commission has not referenced any evidence in the record indicating that municipal utilities have any role in identifying "preferred generation resources that may not otherwise be able to succeed in a competitive wholesale market" or that the activities of a municipal utility to build or contract for generation resources to meet the needs of its customers constitutes a payment by a state to support preferred resources. IMEA argues that municipal utilities instead build or obtain generation to meet customer needs, not distort prices. IMEA argues that it operates like any other non-governmental load-serving entity to fulfill service obligations to its customers, funded by rates paid by those customers.[468] Allegheny states that the Commission's rationale that states should bear the consequences of the policy decisions they make does not apply to electric cooperatives who do not make policy decisions, but rather transact in order to secure economic energy and capacity for their members and customers.[469]

208. NCEMC states that the Commission failed to address the testimony of Mr. Marc Montalvo demonstrating that: (a) the ratepayer revenues received by municipal and rural electric cooperative utilities in support of self-supply resources are significantly different from the out-of-market subsidies required by the states that the Commission determined should be mitigated under the MOPR; (b) the self-supply activities of cooperatives are consistent with behaviors expected of market participants in competitive markets; and (c) application of the MOPR to self-supply would suppress rather than enhance competition.[470] NCEMC further contends that the Montalvo declaration supports the

[467] NRECA/EKPC Clarification and Rehearing Request at 17 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 68).

[468] IMEA Rehearing and Clarification Request at 9-11.

[469] Allegheny Rehearing Request at 11-12 (stating that double payment is particularly problematic for cooperatives in rural economically depressed communities, and the Commission failed to address that subjecting electric cooperatives to the MOPR would result in customers paying twice).

[470] NCEMC Clarification and Rehearing Request at 16 (citing NRECA Initial Testimony, Dec. of Marc D. Montalvo at PP 6-13, 24, 39-43, 45-49 (filed Oct. 1, 2018));

premise that self-supply must be guaranteed to clear in the market in order to avoid the risk of customers paying twice for capacity that fails to clear the market.[471]

209. Parties argue the Commission lacked substantial evidence to apply the expanded MOPR to self-supply resources. Parties argue that there is no justification for applying the MOPR to self-supply resources because there is: (1) no evidence of growth similar to that which the December 2019 Order cited for other programs; (2) no record evidence that self-supply poses a threat to the capacity market; and (3) no evidence that these entities engage in buyer-side market power.[472] NRECA/EKPC state that the only record evidence relied upon, that new self-supply represents 30% of the new generation added to PJM from 2010-2017, is insufficient, especially where public power accounts for only five percent of sales in PJM.[473] PJM argues the record demonstrates that the capacity market has achieved the new investment and retirement of inefficient investment that it is designed to achieve, notwithstanding any impact from self-supply utilities.[474]

210. Parties argue that the Commission erred in failing to provide an exemption for self-supply resources and ask the Commission to grant rehearing and accept PJM's proposed self-supply exemption for new and existing self-supply resources, which includes net short and net long thresholds, arguing the Commission has not justified, or provided record evidence to support, the departure from longstanding Commission policy

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*see also* NRECA/EKPC Clarification and Rehearing Request at 28-29 (arguing self-supply entities invest in a manner consistent with a competitive market).

[471] NCEMC Clarification and Rehearing Request at 17.

[472] PJM Rehearing and Clarification Request at 13; *see also* Allegheny Rehearing Request at 12 (stating that there is no record evidence that electric cooperatives pose price suppression concerns); NCEMC Clarification and Rehearing Request at 4, 9-16; Dominion Rehearing and Clarification Request at 7, 10-13; West Virginia Commission Rehearing Request at 2, 5; NRECA/EKPC Clarification and Rehearing Request at 51-52 (arguing the Commission neither justifies the finding that self-supply has the ability to suppress prices nor the departure from precedent that it lacks the incentive to do so); NCEMC Clarification and Rehearing Request at 9, 12.

[473] NRECA/EKPC Clarification and Rehearing Request at 54-55 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 204); *see also* Dominion Rehearing and Clarification Request at 13.

[474] PJM Rehearing and Clarification Request at 14; *see also* Dominion Rehearing and Clarification Request at 13.

regarding self-supply resources.[475] Parties assert the December 2019 Order's rejection of PJM's self-supply exemption failed to consider arguments and evidence that the exemption would not raise price suppression concerns with the inclusion of the net short and net long thresholds.[476]

211. Clean Energy Associations and NRECA/EKPC challenge the Commission's statement that the prior self-supply exemption was a temporary reversal in Commission policy, stating that from the beginning of the PJM capacity market, the Commission has accommodated self-supply participation[477] and longstanding business models.[478] Parties assert that the Commission does not explain why it no longer believes that an exemption with net short and net long thresholds is appropriate, further noting that state regulatory treatment has not changed since the Commission accepted the previous self-supply exemption in 2013.[479]

212. Dominion states that, in citing the amount of new self-supply resources entering the capacity market in recent years, the Commission ignored the fact that self-supply entities in PJM have experienced an equal or greater amount of retirements of coal and oil-fired units and notes that Dominion forecasts a capacity gap between its Minimum PJM Load with Reserve Margin (net of energy efficiency) and its existing generation

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[475] PJM Rehearing and Clarification Request at 13-14; ELCON Rehearing Request at 10; NRECA/EKPC Clarification and Rehearing Request at 47-54; Public Power Entities Rehearing and Clarification Request at 18; NCEMC Clarification and Rehearing Request at 4, 8; Clean Energy Associations Rehearing and Clarification Request at 42; Dominion Rehearing and Clarification Request at 13.

[476] NRECA/EKPC Clarification and Rehearing Request at 56-60; Dominion Rehearing and Clarification Request at 7-8, 10-13; ODEC Rehearing Request at 12.

[477] Clean Energy Associations Rehearing and Clarification Request at 42 (citing *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079 (2006) (preserving self-supply as an option under the new capacity market construct)).

[478] NRECA/EKPC Clarification and Rehearing Request at 49-50. NRECA/EKPC note that the Commission did not determine on remand from *NRG* that the self-supply exemption was unreasonable on the merits. *Id.* at 50-51; *see also* NCEMC Clarification and Rehearing Request at 12-13.

[479] PJM Rehearing and Clarification Request at 9 (citing 2011 MOPR Order, 137 FERC ¶ 61,145 at P 208); 2013 MOPR Order, 143 FERC ¶ 61,090 at P 107 (net long and net short thresholds in principle protect the market)); NRECA/EKPC Clarification and Rehearing Request at 46 (same); ODEC Rehearing Request at 10; NCEMC Clarification and Rehearing Request at 11-14.

approaching almost 3,000 MW beginning in 2025.[480] Dominion therefore argues that PJM's proposed application of the self-supply exemption (which includes net short and net long thresholds) recognizes that self-supply entities that are net short are unable and have no incentive to suppress capacity prices.[481] ODEC argues that the Commission failed to engage in reasoned decision-making by ignoring evidence demonstrating the need for an exemption for self-supply electric cooperatives, resulting in an unjust and unreasonable MOPR.[482] ODEC and NRECA/EKPC contend that public power entities should be exempt from the MOPR, subject to net short and net long thresholds, because they do not have profit incentives and they recover costs through a cost-of-service formula rate subject to Commission-jurisdiction, not through state payments.[483]

213. NCEMC likewise argues that the Commission failed to address concerns raised by load-serving entities that subjecting all new self-supply to the MOPR would be fundamentally inconsistent with the self-supply business model long used by municipal, rural electric cooperative, and vertically integrated utilities to serve their loads.[484] NRECA/EKPC argue that the December 2019 Order risks customers of electric cooperatives having to pay twice for a single capacity obligation, which would chill investment decisions in new resources to serve electric cooperative load and undermine the Commission's previously-stated purpose of not unreasonably impeding the efforts of resources to procure or build capacity under longstanding business models.[485] NRECA/EKPC further state that the December 2019 Order discourages investing in resources which would be economic over the long-term life of the resource.[486]

214. PJM argues that, by applying the MOPR to new self-supply resources, the December 2019 Order excludes resources that may not be economic as determined by an

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[480] Dominion Rehearing and Clarification Request at 13-14 (citing *In Re: Va. Elec. & Power Company's Updated to Integrated Res. Plan filing pursuant to Va. Code § 56-597 et seq.* Case No. PUR-201900141 at 10, Figure 1: Capacity Position.).

[481] *Id*. at 14.

[482] ODEC Rehearing Request at 6, 10-11.

[483] *Id*. at 11; NRECA/EKPC Clarification and Rehearing Request at 31, 61.

[484] NCEMC Clarification and Rehearing Request at 4.

[485] NRECA/EKPC Clarification and Rehearing Request at 34-37 (citing 2011 MOPR Order, 137 FERC ¶ 61,145 at P 208); NCEMC Clarification and Rehearing Request at 4, 8-9; Public Power Entities Rehearing and Clarification Request at 18.

[486] NRECA/EKPC Clarification and Rehearing Request at 35-36.

administratively prescriptive offer but are nonetheless desirable to the state or an integrated utility for purposes of self-supply obligation. PJM asserts that self-supply entities invest based on long-term load obligations, rather than the short-term capacity market, and may therefore have excess capacity in the early years of a resource that is designed to meet future load obligations. PJM argues, however, that this excess would have little effective impact on the capacity market, provided that the utility meets the net long and net short tests.[487]

215. NRECA/EKPC likewise argue that not all entry and exit decisions must be coordinated by the capacity market to be deemed economic, and that the capacity market prices do not fully reflect the complete set of market participant preferences because market participants incorporate other criteria besides capacity market prices in resource planning decisions.[488] NRECA/EKPC thus assert that the capacity market is incapable of signaling for the types of resources that optimally satisfy all of a buyers' preferences.[489] NCEMC reiterates that out-of-market revenues received by self-supply resources from ratepayer payments are a substitute for, not a supplement to, PJM capacity market revenues,[490] and thus do not impact the capacity market, because the revenue paid by an electric cooperative as a load-serving entity is netted against the payment due to that cooperative for that transaction as a seller.[491] NRECA/EKPC argue that investment in resources outside the capacity construct should result in decreased capacity market prices.[492]

216. ODEC argues that expanding the MOPR will have a chilling effect on investment in new self-supply resources, who will now have to shift their focus from long-term economics to the single-year capacity auction.[493] NCEMC argues that a unit-specific

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[487] PJM Rehearing and Clarification Request at 9; *see also* ODEC Rehearing Request at 11.

[488] NRECA/EKPC Clarification and Rehearing Request at 29-30.

[489] *Id*. at 57 (arguing that public power entities base decisions on long-term planning, as opposed to the short-term capacity market, and derive benefits beyond those available in the RPM); *see also* Public Power Entities Rehearing and Clarification Request at 31.

[490] NCEMC Clarification and Rehearing Request at 15-16.

[491] *Id*. at 6.

[492] NRECA/EKPC Clarification and Rehearing Request at 28-29.

[493] ODEC Rehearing Request at 3-4.

exemption would not remedy the chilling effect that the risk of double payments would have on investment in self-supply resources, contending that the Commission never addressed this testimony in reaching its conclusion that the Unit-Specific Exemption would suffice to address self-supply concerns.[494]

217. Noting the December 2019 Order disagreed with the premise that self-supply entities should face less risk as a result of their business model, ODEC contends that premise stems from Commission precedent recognizing that: (1) self-supply by public power load-serving entities, within certain thresholds, does not threaten competitive outcomes; (2) self-supply by electric cooperatives is not supported by direct payments made or mandated by states; (3) the purpose of the MOPR is not to unreasonably impede such efforts by self-supply; and (4) application of MOPR to self-supply subjects electric cooperative customers to the risk of double payment for capacity.[495] Public Power Entities argue that the December 2019 Order incorrectly assumes that self-supply entities have a competitive advantage, and states that public power shoulders risks of its own, including the inability to broadly distribute its financial risks.[496] Public Power Entities assert that public power self-supply participation in the capacity market on an unmitigated basis is consistent with reasonable market design principles.[497]

218. NRECA/EKPC further contend that the December 2019 Order is an unexplained departure from Commission precedent encouraging and facilitating long-term power

[494] NCEMC Clarification and Rehearing Request at 17 (citing Montalvo Testimony, Initial Submission of National Rural Electric Cooperative Association at 3-4, 7 and December 2019 Order, 169 FERC ¶ 61,239 at P 180); Public Power Entities Clarification and Rehearing Request at 40-42; ODEC Rehearing Request at 13 (arguing that the Unit-Specific Exemption is too subjective to form a basis for investment in long-term resources).

[495] ODEC Rehearing Request at 10; *see also* NCEMC Clarification and Rehearing Request at 14 (citing *PJM Interconnection, LLC*, 95 FERC ¶ 61,175, 61,563 (2001) (order on PJM's capacity market design in 2001); *PJM Interconnection, LLC*, 115 FERC ¶ 61,079, at P 71 (2006) (order on PJM's current RPM capacity market design); *PJM Interconnection, LLC*, 117 FERC ¶ 61,331, at P 13 (2006) (order on rehearing accepting PJM's current RPM capacity market design)); Public Power Entities Rehearing and Clarification Request at 28-29; NRECA/EKPC Clarification and Rehearing Request at 52 (arguing the Commission previously found that the purpose of the MOPR is not to impede a longstanding business model) (citing 2011 MOPR Order, 137 FERC ¶ 61,145 at P 208; 2013 MOPR Order, 143 FERC ¶ 61,090 at P 108).

[496] Public Power Entities Rehearing and Clarification Request at 27-28.

[497] *Id*. at 20; *see also* NCEMC Clarification and Rehearing Request at 14.

supply arrangement in RTO regions.[498] NRECA/EKPC point to FPA section 217, which requires the Commission to exercise its authority in a manner that "enables load-serving entities to secure firm transmission rights (or equivalent tradable or financial rights) on a long-term basis for long-term power supply arrangements made, or planned, to meet such needs" and resulting Commission regulations directing RTOs to make available firm transmission rights with terms long enough to hedge long-term power contracts.[499] NRECA/EKPC further argue that the December Order is an unexplained departure from Commission precedent holding that electric cooperatives cannot subsidize their wholesale market operations through charges on their members.[500]

219. Allegheny contends that, by including the contracting power of cooperatives within the definition of State Subsidy, the Commission violates is own cost causation principle, which allocates costs to those who caused the costs to be incurred and reaped the resulting benefits.[501] Allegheny asserts the December 2019 Order failed to make any findings that cooperative self-supply resources impose costs on the PJM capacity market or suppresses prices, but the December 2019 Order imposes costs on customers when the customers did not cause the costs to be incurred.[502]

**b. Commission Determination**

220. We affirm our conclusion that self-supply, including public power, should not be exempt from the expanded MOPR. Vertically integrated utilities, through cost-of-service rates approved by state public utility commissions, receive guaranteed cost recovery. Electric cooperatives and municipal utilities fit within the State Subsidy definition because they are created by state law, or, in the case of municipal utilities, are a subdivision or agency of the state, and thus are appropriately treated as units of state or

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[498] NRECA/EKPC Clarification and Rehearing Request at 37-39.

[499] *Id*. at 38-39 (stating that in 2008, the Commission adopted regulations requiring RTOs to dedicate a portion of their websites for participants to post offers to buy or sell power on a long-term basis, with the goal of promoting long-term contracts); *see also* Public Power Entities Rehearing and Clarification Request at 29-30.

[500] NRECA/EKPC Clarification and Rehearing Request at 41-42 (stating electric cooperatives' members are both ratepayers and owners and the Commission has previously determined that electric cooperatives are exempt from the affiliate abuse restrictions because electric cooperatives do not present affiliate abuse dangers through self-dealing).

[501] Allegheny Rehearing Request at 7, 12-13.

[502] *Id*. at 13.

local government.[503] Generation and transmission cooperatives receive guaranteed cost recovery through long-term supply agreements and other bilateral contracts with their members. Distribution cooperatives receive guaranteed cost recovery through member rates. Receipt of these benefits allows resources owned by electric cooperatives to offer into the capacity market below their costs.[504] Municipal utilities likewise receive guaranteed cost recovery through customer rates and joint action agencies receive guaranteed cost recovery through long-term contracts with their members. Unsubsidized resources do not have access to these benefits. Moreover, we reiterate that we can no longer assume that there is any substantive difference among types of resources participating in the PJM capacity market with the benefit of out-of-market support with respect to the resources' ability to distort capacity market prices, and therefore disagree that the payments received by municipal utilities and electric cooperatives are materially different from the payments received by, for example, RPS and ZEC resources for purposes of the expanded MOPR.[505]

221. Likewise, ODEC and NRECA/EKPC's argument that some electric cooperatives receive cost-of-service rates approved by the Commission does not change our conclusion. Electric cooperatives are subject to the expanded MOPR because their business model results in payments within the State Subsidy definition for resources that participate in the capacity market, as discussed above. The fact that the Commission regulates FPA-jurisdictional cooperatives' wholesale rates has no bearing on the fact that the cooperative business model enables cooperatives to offer into the capacity market below cost and suppress prices because they are guaranteed cost recovery. In this respect electric cooperatives' guaranteed cost recovery is no different than that of vertically integrated utilities with state-approved retail rates, enabling vertically integrated utilities to offer into the market as price takers and suppress prices.

222. We further reject arguments that self-supply entities, including public power, should not be subject to the expanded MOPR because they do not make policy decisions or identify state-preferred resources, or that the long-term power purchase contracts do not mandate support for particular resources or support the entry or continued operation of capacity resources. Public power, as discussed above, is a governmental entity making decisions regarding resource generation, and thus public power entities do make policy decisions to identify preferred resources. In any event, nothing in either the June 2018

[503] 16 U.S.C. § 824(f).

[504] *See* December 2019 Order, 163 FERC ¶ 61,239 at PP 203-204 (finding that self-supply entities have the same price suppression ability as other State-Subsidized Resources); June 2018 Order, 163 FERC ¶ 61,236 at PP 153-156 (describing how out-of-market support gives resources the ability to suppress capacity market prices).

[505] June 2018 Order, 163 FERC ¶ 61,236 at P 155.

Order or the December 2019 Order requires that the State Subsidy be received by a market participant that is able to make policy decisions, nor would such a requirement be just and reasonable. Regardless of whether the market participant is able to make policy decisions, market participants that receive or are eligible to receive State Subsidies can offer into the market lower than they otherwise would. This is also true regardless of any difference parties cite between public power entities and resources receiving other State Subsidies, for example, that public power builds generation to meet consumer needs and transacts to secure economic capacity for their members, and not to distort market prices. We fail to see how public power are unlike other State-Subsidized Resources in the only way that matters for the purposes of applying the MOPR to these resources—namely, that they receive State Subsidies that allow those resources to offer into the capacity market below their costs. Moreover, we disagree that the long-term power purchase contracts entered into by public power to supply load to customers do not support the continued operation or entry of capacity resources or do not directly affect new entry or continued operation of generating capacity in PJM, regardless of intent. Such contracts directly support new and existing capacity resources by providing a guaranteed revenue stream.

223. As to Mr. Marc Montalvo's affidavit, even if the self-supply activities of cooperatives are consistent with behaviors expected of market participants in competitive markets, this does not justify exempting them from application of the MOPR, which focuses on State Subsidies. If these activities truly reflect competitive forces, such resources will be able to use the Unit-Specific Exemption and qualify for a lower offer. And, even if some self-supply customers pay more ("pay twice") for capacity, preserving the integrity of the capacity market will benefit customers over time by ensuring capacity is available when needed. We disagree that self-supply allegedly does not impact the market because the revenue paid by a load-serving self-supply utility is netted against the payment due that entity as a seller. Regardless of netting, the State Subsidy allows a resource to offer below its costs. We further disagree with NCEMC's assertion that application of the MOPR to self-supply would suppress rather than enhance competition[506] because, as we have explained, guaranteed cost recovery creates an uneven level of competition among resources in PJM's capacity market and permits below cost offers. NCEMC does not appear to explain why it believes applying the MOPR to self-supply resources would reduce competition, but, regardless, as we have explained, the June 2018 Order and December 2019 Order foster competition and protect the integrity of the market by ensuring that all resources offer competitively.

224. We disagree with parties' assertions that the Commission lacked substantial evidence to justify applying the MOPR to self-supply resources. Parties aver that there is no evidence of growth similar to that which the December 2019 Order cited for other

[506] NCEMC Clarification and Rehearing Request at 16 (citing NRECA Initial Testimony, Montalvo Dec. at PP 6-13, 24, 39-43, 45-49 (filed Oct. 2, 2018)).

programs and no record evidence that self-supply poses a threat to the capacity market. Despite parties' arguments to the contrary, we are not required to show that self-supply has increased in a manner similar to RPS and ZEC payments. The June 2018 Order made clear that price suppression as a result of out-of-market support was not just and reasonable and did not limit that finding to only RPS and ZEC payments.[507] Although the increases in out-of-market support warranted a shift in policy, it would have been unduly discriminatory to mitigate the impact of only those programs that were shown to be increasing, rather than all resources receiving State Subsidies, given that all State-Subsidized Resources have the ability to suppress prices. The Commission explicitly addressed this, stating that "we no longer can assume that there is any substantive difference among the types of resources participating in PJM's capacity market with the benefit of out-of-market support."[508] PJM's argument that the capacity market has facilitated new investment and the retirement of inefficient investment notwithstanding participation by self-supply utilities misses the point. While the existing capacity market design has facilitated the entry and exit of some resources, it is undeniable that State Subsidies that promote the retention or entrance of new resources that would otherwise be uneconomic impact market clearing prices and thus the entry and exit decisions of other resources.

225. Because self-supply resources have guaranteed cost recovery, they are able to offer into the capacity market below their costs and suppress prices below the competitive level. This is true even if these resources are making rational offers based on their guaranteed cost recovery and do not willfully "intend" to distort prices. Since these self-supply resources receive State Subsidies that support the entry or continued operation of preferred generation resources, regardless of intent, we affirm our determination that these resources should be subject to the expanded MOPR, just as are other State-Subsidized Resources. Applying the expanded MOPR to self-supply resources going forward enables the Commission to meet the objectives of this proceeding, namely a capacity market in which all participants are making competitive offers.

226. We deny parties' request for a Self-Supply Exemption for new, and future existing, self-supply resources, and affirm our determination that it is just and reasonable to apply the MOPR to new self-supply resources without using net short and net long

[507] December 2019 Order, 169 FERC ¶ 61,239 at P 150.

[508] *Id*. P 155.

thresholds.[509] We recognize, based on the record in this proceeding, the potential for self-supply resources to suppress capacity market clearing prices, regardless of intent.[510]

227. Parties argue that applying the MOPR to new self-supply resources is an unexplained departure from precedent, that self-supply entities lack incentive to exercise buyer-side market power, and that the Commission did not explain why an exemption with net long and net short thresholds was no longer just and reasonable. We disagree.

228. PJM's prior self-supply exemption was in effect from 2013 to 2017.[511] While parties may disagree with the Commission's characterization of this period as a "temporary reversal in Commission policy,"[512] the salient point is that the Commission explained in the December 2019 Order that self-supply entities may have the ability to suppress prices going forward, regardless of intent, and therefore it would not be appropriate to exempt self-supply resources from the MOPR. The Commission has not found that self-supply entities lack the incentive or ability to exercise market power and suppress capacity prices.[513] The Commission determined in 2013 that PJM's proposed self-supply exemption with net short and net long thresholds was just and reasonable because, acting within net short and net long thresholds, a self-supply utility meets a sufficiently large proportion of its capacity needs through its own generation investment, and thus "has little or no incentive to suppress capacity market prices."[514] As this quotation illustrates, that precedent hinged on incent, namely whether self-supply resources have the incentive and ability to distort capacity market prices. As explained in the December 2019 Order, the expanded MOPR is premised on a resource's ability to suppress price due to the benefit it receives from out-of-market support, not based on the likelihood, ability and incentive to exercise buyer-side market power. The December 2019 Order recognized that self-supply entities have the ability to suppress capacity prices because their guaranteed cost recovery permits below cost offers, thus interfering with competitive price formation. In sum, while previously the Commission focused on intent or ability and incentive to exercise buyer-side market power and suppress prices,

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[509] *Id*. PP 202-204.

[510] *Id*. P 204.

[511] *See* June 2018 Order, 163 FERC ¶ 61,236 at P 14.

[512] December 2019 Order, 169 FERC ¶ 61,239 at P 203.

[513] 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 107-109 (reiterating 2011 determination that a blanket self-supply exemption would allow for an unacceptable opportunity for self-supply resources to exercise buyer-side market power).

[514] *Id*. P 108.

now the Commission recognizes and takes action to prevent the price-suppressive effect self-supply resources offering below cost can have on capacity market clearing prices, regardless of intent to exercise buyer-side market power and/or suppress capacity market prices. Thus, the Commission has explained any perceived departure from precedent.[515]

229. Parties contend that self-supply is a longstanding business model and applying the MOPR to self-supply resources is a fatal disruption, contrary to precedent. However, their longstanding business model does not provide a basis for treating them differently than any other State-Subsidized Resource. We recognize that the Commission has previously stated that the purpose of the MOPR "is not to unreasonably impede the efforts of resources choosing to procure or build capacity under longstanding business models,"[516] and that the December 2019 Order may impact long-term contracts and planning. Nevertheless, we find it necessary going forward to apply the MOPR to self-supply resources like other mitigated State-Subsidized Resources in order to protect capacity market prices. We continue to find the December 2019 Order struck the appropriate balance, providing an exemption for existing self-supply resources because these self-supply entities made resource decisions based on affirmative guidance from the Commission indicating that those decisions would not be disruptive to competitive markets, but requiring that new self-supply resources offer at or above the default offer price floor, unless they qualify for an exemption. Self-supply resources are capable of suppressing capacity prices because they can make non-competitive offers, even if they invest in resources within the net short and net long thresholds and appropriately sized for future load growth. Further, we find that it is just and reasonable to apply the default offer price floors to self-supply resources because, going forward, self-supply entities desiring to build out capacity for future load growth should not be allowed to choose a resource that is not economic, subsidize its construction, and sell the excess capacity into the competitive market. We clarify that while this behavior is now prohibited, the orders in this proceeding do not prohibit the self-supply business model, or long-term decision-making, but merely ensure that all resources offer competitively. Moreover, the Unit-Specific Exemption is available as a means to demonstrate the competitiveness of an offer below the default offer price floor for self-supply resources.

230. Parties argue that the capacity market does not signal for the types of resources that optimally satisfy all of buyers' preferences and that not all entry and exit decisions must be coordinated through the capacity market to be deemed economic. However, the

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[515] *See Motor Vehicle Manufacturer's Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1989) (holding 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'"); *Key-Span-Ravenswood, LLC v. FERC*, 348 F.3d 1053 (D.C. Cir. 2003) (requiring Commission to "adequately explain its decision").

[516] 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 208.

December 2019 Order establishes a replacement rate to protect the integrity of price signals in the multi-state capacity market. The objective of the capacity market is to select the least cost resources to meet resource adequacy goals. It is thus necessary to ensure that resources offer competitively so that all market participants receive clear price signals, and, if an offer does not clear, it is not economic.

231. We reject arguments that self-supply entities should be accommodated because they make investments outside of the capacity market. We are not regulating such investments in this order; rather, we find that such investments will not be allowed to suppress capacity market prices. NCEMC argues that a broader self-supply exemption is needed because the Unit-Specific Exemption does not ameliorate the double payment concerns of some resources not clearing under the Unit-Specific Exemption. However, the Unit-Specific Exemption is a means for resources to demonstrate that their offers are competitive, and we find that NCEMC's request undermines the purpose of the Unit-Specific Exemption, which is to allow a State-Subsidized Resource to justify a competitive offer below the default offer price floor. ODEC argues that the Unit-Specific Exemption is too subjective to form the basis for investment in long-term resources. The December 2019 Order already addressed this point and directed PJM to provide "more explicit information about the standards it will apply when conducting the unit-specific review as a safeguard against arbitrary ad hoc determinations that market participants and the Commission may be unable to reliably predict or reconstruct."[517]

232. Parties contend that it is unreasonable to apply the MOPR to electric cooperatives and other self-supply entities because it will chill investment in these resources and force customers to pay twice for a single capacity obligation. States are free to choose to remain vertically integrated, to support those resources through guaranteed rate recovery, and to foster the cooperative model. However, we again reiterate that the courts have acknowledged that customers in those states may bear the consequences of those decisions, including paying twice for capacity.[518] The Commission is obligated to ensure the competitiveness of the capacity market in order to ensure long-term resource-adequacy in PJM, regardless of state actions that may cost consumers more. We are similarly obliged to ensure that those market-based rates are just and reasonable and non-discriminatory through market mechanisms that are not distorted by subsidies for state-favored resources.

233. We also reject arguments that self-supply entities do not have a competitive advantage. The ability to offer these resources below cost increases the likelihood that they will receive capacity supply obligations, giving these resources a competitive advantage over resources that are not guaranteed cost recovery. Unlike unsubsidized

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[517] December 2019 Order, 169 FERC ¶ 61,239 at P 216.

[518] *NJBPU*, 744 F.3d at 96-97 (quoting *Connecticut PUC*, 569 F.3d at 481).

resources, guaranteed rate recovery protects self-supply resources from the potential downside of that offering behavior, allowing them to "face less risk" than other resources in choosing whether to build their own capacity generation resources or rely on the markets to meet their energy and capacity requirements.[519] If self-supply resources were to receive a blanket exemption, this advantage would only deepen. Further, with respect to ODEC's arguments that the Commission's prior precedent granted a competitive advantage to self-supply entities: (1) those thresholds only applied to the mitigation of buyer-side market power, not mitigation based on State Subsidies; (2) the definition of State Subsidy includes state payments by public power; (3) the MOPR does not unreasonably impede self-supply, but only requires that self-supply resources offer consistent with their costs; and (4) we have repeatedly reiterated that the courts have found that consumers will appropriately bear the risk of having to pay twice for capacity.

234. NRECA/EKPC contend that the Commission has previously determined that "electric cooperatives cannot subsidize their wholesale market operations through charges on their members" and thus the December 2019 Order departs from precedent that exempts cooperatives from the Commission's affiliate abuse restrictions, based on a finding that transactions of an electric cooperative with its members do not present dangers of affiliate abuse through self-dealing.[520] We disagree. NRECA/EKPC construe the market-based rate/affiliate abuse precedent too broadly. In those cases, the Commission only determined that electric cooperatives do not present self-dealing concerns,[521] which has no bearing on this proceeding, which focuses on the justness and reasonableness of PJM capacity market rates. Specifically, in the market-based rate proceedings, the Commission explained that allowing market-based rates in a self-dealing transaction would enable a purchaser to favor its affiliated power seller over other potential power sellers, which could result in captive customers of public utilities paying more than the market price for power used to serve them.[522] However, in those cases the Commission also recognized that, because the cooperative's members are both the cooperative's ratepayers and its shareholders, any profits earned by the cooperative will

[519] December 2019 Order, 169 FERC ¶ 61,239 at P 204.

[520] NRECA/EKPC Clarification and Rehearing Request at 40-42 & nn.90-91 (citing *Mkt.-Based Rates for Wholesale Sales of Elec. Energy, Capacity & Ancillary Servs. by Pub. Utils.*, Order No. 697, 72 Fed. Reg. 39,904, 39,966, FERC Stats & Regs. ¶ 31,252 at P 526 (2007) (Market-Based Rate Order); *Cross-Subsidization Restrictions on Affiliate Transactions*, Order No. 707, 73 Fed. Reg. 11,013, 11,021, FERC Stats. & Regs ¶ 31,264, at P 49 (2008)).

[521] *See* Order No. 707, FERC Stats. & Regs ¶ 31,264, at P 49 & n.48 (citing Market Based Rate Order, FERC Stats & Regs. ¶ 31,252 at P 526).

[522] *See, e.g.*, *Old Dominion Elec. Coop.*, 81 FERC ¶ 61,044, at 61,236 (1997).

inure to the benefit of the cooperative's ratepayers.[523] Therefore, the Commission found that cooperatives present no potential danger of affiliate abuse by shifting benefits from the ratepayers to the shareholders.[524] The focus in those market-based rate/affiliate abuse proceedings was on the transactions between the cooperatives—whether one cooperative was subsidizing another. The Commission never considered in those market-based rates/affiliate abuse proceedings whether the cooperatives' long-term power supply agreements could constitute subsidies for purpose of ensuring the integrity of the capacity market clearing price. As the focus in this proceeding, however, is on the cooperatives' State-Subsidized self-supply resource offers into the PJM capacity market, as compared with other non-State-Subsidized Resource offers, and applying the MOPR to those State-Subsidized Resources to ensure a competitive capacity market, we find NRECA/EKPC's arguments unpersuasive.

235. NRECA/EKPC argue the December 2019 Order "inexplicably" deems self-supply long-term power supply arrangements in PJM to be inherently suspect and anticompetitive.[525] NRECA/EKPC argue the December 2019 Order conflicts with the statutory directive to "enable[] load-serving entities to secure firm transmission rights (or equivalent tradable or financial rights) on a long-term basis for long-term power supply arrangements made, or planned, to meet such needs" and undermines the Commission's implementing regulations directing RTOs to make available firm transmission rights with terms long enough to hedge long-term power contracts.[526] We disagree. The December 2019 Order does not prevent self-supply entities from entering into long-term contracts, nor does the order impinge on their right to obtain long-term firm transmission rights. The December 2019 Order applies the MOPR to new self-supply resources, including those owned by or under contract to public power, to protect the integrity of the capacity market. Ensuring the justness and reasonableness of wholesale capacity market prices through the MOPR is distinct from supporting long-term firm transmission rights. And, while the Commission requires RTOs to create websites to enable market participants to post offers to buy or sell on a long-term basis,[527] this requirement was intended to

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[523] *See id.* at 61,236 & n.7 (citing *Hinson Power Co.*, 72 FERC ¶ 61,190, at 61,911 (1995)); *see also* Market Based Rate Order, FERC Stats & Regs. ¶ 31,252 at P 526 & n.541.

[524] Market-Based Rate Order, FERC Stats & Regs. ¶ 31,252 at P 526 & n.541.

[525] NRECA/EKPC Clarification and Rehearing Request at 38.

[526] *Id.* at 38-39 (citing FPA § 217, 16 U.S.C. § 824q (2018)).

[527] *See Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, FERC Stats. & Regs. ¶ 31,081 (cross-referenced at 125 FERC ¶ 61,071, at P 307 (2008)), *order on reh'g*, Order No. 719-A, FERC Stats. & Regs. ¶ 31,292 (cross-

enhance transparency and foster long-term contracting generally. It does not undermine our efforts here to protect the integrity of capacity market prices.

236. As to Allegheny's argument that the December 2019 Order violates cost causation principles, we clarify that the December 2019 Order does not directly allocate costs to any party. Rather, it ensures a just and reasonable outcome in the capacity market by ensuring that all resources offer commensurately with their costs. We also disagree that self-supply entities do not impose costs on the market. State-Subsidized Resources offering below their costs cause unjust and unreasonable price distortions. With respect to the costs Allegheny argues the December 2019 Order imposes on self-supply, it is unclear to which costs Allegheny is referring, but to the extent Allegheny is arguing that self-supply entities should not bear a risk of double payment, we disagree, as the Commission has repeatedly explained. To the extent Allegheny is arguing that self-supply entities do not benefit from their guaranteed retail rate recovery and therefore should not be forced to offer into the capacity market competitively, we disagree, on the basis that guaranteed payments are clearly a benefit.

### c. Requests for Clarification

237. Parties request clarification as to whether public power self-supply entities can engage in voluntary, arms-length bilateral contracts with unaffiliated third parties without triggering the MOPR.[528] Buckeye argues this clarification is necessary because, if interpreted too broadly, the Commission's definition of State Subsidy could potentially apply to virtually any action that an electric cooperative would take to obtain new capacity, subjecting the cooperative to potential double payments.[529]

238. NRECA/EKPC seek clarification that when electric cooperatives meet load obligations through bilateral contracts with third parties, such contracts are voluntary, arm's length bilateral transactions and do not fall within the definition of State Subsidy. Likewise, NRECA/EKPC state that agreements between electric cooperatives and their

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referenced at 128 FERC ¶ 61,059 (2009)), *order on reh'g*, Order No. 719-B, 129 FERC ¶ 61,252 (2009); *see also* 18 C.F.R § 35.28(g)(2).

[528] Buckeye Clarification and Rehearing Request at 6 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 70); IMEA Rehearing and Clarification Request at 3-4; Public Power Entities Rehearing and Clarification Request at 51-53; NRECA/EKPC Clarification and Rehearing Request at 20-21; NCEMC Rehearing and Clarification Request at 6-7.

[529] Buckeye Clarification and Rehearing Request at 5; *see also* IMEA Rehearing and Clarification Request at 4 (arguing that the December Order would render all commercial or contracting activity by a municipal agency subject to the MOPR).

members are voluntary, arm's length bilateral transactions, and, therefore, sell offers by resources owned by electric cooperatives should be exempt from the definition of State Subsidy.[530] IMEA asserts that, if the Commission declines to clarify this issue, the Commission should grant rehearing because the Commission's decision to apply the MOPR to all commercial and contracting activity of municipal utilities via the expansive and unlawful definition of State Subsidies amounts to undue discrimination against those municipal entities.[531]

239. NRECA/EKPC ask the Commission to clarify that financing through Rural Utilities Service (RUS) debt alone will not trigger application of the MOPR because it is a federal source of financing.[532]

240. AEP/Duke seek clarification that existing self-supply capacity within an FRR capacity plan will qualify for the self-supply exemption if such existing capacity elects to participate in a PJM capacity market auction.[533] AEP/Duke assert that the December 2019 Order is unclear on how the expanded MOPR and MOPR exemptions will apply to existing rules that allow an FRR entity to offer limited amounts of excess capacity in a Reliability Pricing Model (RPM) auction without having its offer mitigated.[534] AEP/Duke argue that capacity resources included in an FRR capacity plan prior to the December 2019 Order are similarly situated to existing self-supply resources that the Commission exempts as part of the Self-Supply Exemption.[535] AEP/Duke assert that subjecting existing capacity resources within an FRR capacity plan to the MOPR would give preferential treatment to existing self-supply resources and unreasonably disrupt settled expectations since 2006 that existing FRR resources may participate in the capacity market without mitigation.[536]

241. The Market Monitor requests clarification that only resources owned or bilaterally contracted for by the self-supply entity qualify as "existing" for the purposes of the Self-Supply Exemption. For example, the Market Monitor explains, if a self-supply entity purchased an existing resource from a non-self-supply entity, that resource would not be

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[530] NRECA/EKPC Clarification and Rehearing Request at 20-21; *see also* NCEMC Clarification and Rehearing Request at 6.

[531] IMEA Rehearing and Clarification Request at 4-5; *see also* Buckeye Clarification and Rehearing Request at 6.

[532] NRECA/EKPC Clarification and Rehearing Request at 21-22 & n. 40 (citing NRECA Initial Testimony at 26 (filed Oct. 2, 2018)).

[533] AEP/Duke Rehearing and Clarification Request at 18-20.

[534] *Id.* at 18-19, n.40 (citing PJM Reliability Assurance Agreement, Schedule 8.1.E).

[535] *Id.* at 19.

[536] *Id*.

considered "existing" for the purposes of the Self-Supply Exemption and would instead be treated as a new resource.[537] Alternatively, FEU requests clarification that if a self-supply entity purchases an existing resource, that resource will be considered "existing" and not "new" for the purposes of the MOPR exemption.[538]

242. NRECA/EKPC seek clarification on how the definition of State Subsidy and the MOPR exemptions apply to jointly-owned resources, stating that self-supply resources may be jointly owned with non-self-supply entities, or one co-owner may receive a State Subsidy while another does not or elects a MOPR exemption.[539] NRECA/EKPC conclude that the Commission should clarify that the definition of State Subsidy and application of MOPR exemptions apply to each co-owner share of a resource, rather than a whole resource.[540]

### i. <u>Commission Determination</u>

243. We clarify that public power self-supply entities cannot engage in voluntary, arms-length bilateral contracts with unaffiliated third parties without triggering the MOPR. State law sanctions the public power business model, and these voluntary bilateral agreements guarantee cost recovery for public power.[541]

244. Regarding RUS financing, we clarify that because RUS financing is a federal subsidy, it would be inappropriate to apply the MOPR to RUS financing, as we explained in the December 2019 Order[542] and again on rehearing in Section IV.B.8.

245. We clarify that existing self-supply capacity within an FRR capacity plan will qualify for the Self-Supply Exemption if such existing capacity elects to participate in a PJM capacity market auction. The December 2019 Order did not alter the existing FRR Alternative and we agree with AEP/Duke that capacity resources included in an FRR capacity plan prior to the December 2019 Order are similarly situated to existing self-supply resources that the Commission exempts as part of the Self-Supply Exemption. This clarification applies to any self-supply resource that currently meets the

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[537] Market Monitor First Clarification Request at 7.

[538] FEU Rehearing and Clarification Request at 2; see also AEP/Duke Rehearing and Clarification Request at 20.

[539] NRECA/EKPC Clarification and Rehearing Request at 23-24.

[540] *Id*.

[541] December 2019 Order, 169 FERC ¶ 61,239 at P 70.

[542] *Id.* P 10, PP 84-85.

requirements for the Self-Supply Exemption, as described in the December 2019 Order and modified herein, or that was part of an FRR capacity plan prior to the December 2019 Order, that seeks to either re-enter the capacity market or to offer excess capacity into the capacity auction consistent with the current FRR Alternative rules. However, any new State-Subsidized Resources added to an FRR capacity plan after the date of the December 2019 Order will not be considered exempt either in re-entering the capacity market or offering excess capacity into the capacity market.

246. We grant the Market Monitor's requested clarification that only resources currently owned or bilaterally contracted for by the self-supply entity qualify as "existing" for the purposes of the Self-Supply Exemption. Similarly, we deny FEU's request for clarification that, if a self-supply entity purchases an existing resource, that resource will be considered "existing" for the purposes of the MOPR exemption. Such a resource will not be exempt from the MOPR if it was not owned by or contracted for by the self-supply entity at the time of the December 2019 Order.

247. We grant NRECA/EKPC's request for clarification that the definition of State Subsidy and application of MOPR exemptions apply to each co-owner's share of a resource, rather than a whole resource. Only the portion of the resource receiving a State Subsidy will be subject to mitigation under the December 2019 Order.

### 3. Demand Response, Energy Efficiency, and Capacity Storage Resources Exemption

#### a. Requests for Rehearing or Clarification

248. Parties request rehearing as to whether demand response resources should be subject to the MOPR at all, or to a default offer price floor greater than zero, arguing such resources are not similarly situated to generation resources because they do not produce energy.[543] By subjecting demand response resources to the MOPR, Consumer Representatives argue that the December 2019 Order ignores record evidence that this would increase prices in the long-term and ignores the benefits of demand response in contributing to price stability, mitigating market power concerns, enhancing reliability, decreasing prices, and reducing emissions.[544] The Pennsylvania Commission states that Pennsylvania's demand and energy efficiency programs are required to demonstrate cost effectiveness and therefore are not State Subsidies, and requests that the Commission

[543] DC Commission Rehearing and Clarification Request at 11.

[544] Consumer Representatives Rehearing and Clarification Request at 33; *see also* DC Commission Rehearing and Clarification Request at 11; Pennsylvania Commission Rehearing and Clarification Request at 12.

exempt programs that can demonstrate cost effectiveness.[545] Advanced Energy Entities explain that the Commission has previously found that revenues from retail-level demand response programs for providing services distinct from those provided in the capacity market should not be subject to buyer-side market power mitigation.[546]

249. EKPC states that it is concerned that application of the MOPR will have the unintended consequence of creating market inefficiencies because, while a demand response resource can achieve cost-savings for itself without participating in the capacity market, the market will not benefit from the additional competitive resource.[547] EKPC also notes that the PJM grid operator would no longer have visibility into the operation of those demand-side resources and may not be able to anticipate when they will operate, resulting in too much or too little energy being dispatched by PJM in real time.[548] EKPC states it offers demand response capability into the capacity market that is authorized by the Kentucky Commission, but not mandated by state law.[549] EKPC is concerned that one industrial customer who, relying on the capacity market rules in effect prior to the December 2019 Order, has invested millions of dollars to increase its demand response capability, will be considered new and be unable to clear the next auction.[550]

250. Advanced Energy Entities argue that including demand response, energy efficiency, energy storage, and "emerging technology" resources as subject to the expanded MOPR upends established Commission policy without sufficient explanation, particularly in light of the Commission's findings in prior orders that demand response resources should not be subject to mitigation.[551] Advanced Energy Entities state that in

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[545] Pennsylvania Commission Rehearing and Clarification Request at 12.

[546] Advance Energy Entities Rehearing and Clarification Request at 16-17 (citing *N.Y. Pub. Serv. Comm. v. N.Y. Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,137, at P 31 (2017) (NYISO SCR Order)).

[547] EKPC Rehearing and Clarification Request at 20; NRECA/EKPC Clarification and Rehearing Request at 61.

[548] EKPC Rehearing and Clarification Request at 20.

[549] *Id*. at 18.

[550] *Id*. at 19.

[551] Advanced Energy Entities Rehearing and Clarification Request at 19-21 (citing NYISO SCR Order, 158 FERC ¶ 61,137 at P 31; *N.Y. Pub. Serv. Comm'n v. N.Y. Indep. Sys. Operator, Inc.*, 153 FERC ¶ 61,022, at P 10 (2015), *order on reh'g*, 154 FERC ¶ 61,088 (2016); *Consol. Edison Co. of N.Y., Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 150

NYISO, the Commission found that demand response resources should be exempt from buyer-side market mitigation because they have "limited or no incentive and ability to exercise buyer-side market power" because the out-of-market revenue they receive for providing retail services in New York is for a distinct service not tied to participation in NYISO.[552] Advanced Energy Entities further contend that, prior to applying the MOPR, the Commission must show that the resource has market power and the State Subsidies "are put in place because those entities are 'seeking to lower capacity market prices.'"[553]

251. Objecting to the Commission's rejection of its proposed energy efficiency resource exemption, PJM states that energy efficiency resources are not similarly situated to other resources because they focus on reduced consumption and conservation and do not raise price suppression concerns because energy efficiency measures are reflected in the peak load forecast for each delivery year, meaning the auction parameters are adjusted to add the MWs in approved energy efficiency plans back into the reliability requirements. PJM also argues that the capacity market penetration of energy efficiency resources is very limited and there is no record evidence that energy efficiency resources interfere with efficient price formation, regardless of whether they are supported by state policy objectives.[554]

252. The Pennsylvania Commission requests that the Commission reconsider applying the MOPR to demand response and energy efficiency resources, as relevant to the offer requirements of Conservation Service Providers, which the Pennsylvania Commission argues should continue to be allowed to participate in the capacity market without identifying specific customers in advance of the auction.[555] The Pennsylvania Commission argues that it would be burdensome for PJM to calculate minimum offers

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FERC ¶ 61,139, at P 2 (2015), *order on reh'g, clarification, and compliance*, 152 FERC ¶ 61,110 (2015)).

[552] *Id*. at 19-20 (citing NYISO SCR Order, 158 FERC ¶ 61,137 at P 31).

[553] *Id*. at 20 (citing NYISO SCR Order, 158 FERC ¶ 61,137 at P 30).

[554] PJM Rehearing and Clarification Request at 14-15; *see also* Advanced Energy Entities Rehearing and Clarification Request at 13 (arguing that energy efficiency resources cannot suppress capacity market prices due to their treatment under PJM's existing processes) (citing PJM Manual 18 at 2.4.5); CPower/LS Power Rehearing and Clarification Request at 7-8.

[555] Pennsylvania Commission Rehearing and Clarification Request at 11, *see also* Consumer Representatives Rehearing and Clarification Request at 32-34 (citing December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 37)); PJM Manual 18: PJM Capacity Market—Att. C: Demand Resource Sell Offer Plan).

for the hundreds of technologies, as applied to thousands of customers, that can participate in these programs and that the Unit-Specific Exemption is not a reasonable approach for these diverse resources and customers.[556]

253. The Maryland Commission asks that the Commission clarify that new resources participating in retail utility demand response programs are not subject to the new resource MOPR requirement.[557]

254. Advanced Energy Entities request that the Commission clarify that PJM may apply the exemption for existing demand response and energy efficiency resources at both a MW level (for the aggregated zonal resource) and a program level, depending on the type of existing demand response resource, in order to protect investments made by demand response and energy efficiency providers in broader programs that aggregate resources developed through utility-backed mass market demand response and energy efficiency programs.[558]

### b. Commission Determination

255. We deny the requests for rehearing to exempt demand response and energy efficiency resources from the MOPR. First, we disagree that demand response and energy efficiency resources are not similarly situated to generation resources with regard to the MOPR because they do not produce energy. Whether a resource produces energy or reduces consumption is immaterial to whether it should be subject to the MOPR: the December 2019 Order found that all resources that offer as supply in the capacity market can affect the competitiveness of the market and the resource adequacy it was designed to address.[559] Because demand response and energy efficiency resources participate in the capacity market, it is appropriate that they be subject to the capacity market rules. In previous orders, the Commission determined that demand response resources and energy

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[556] Pennsylvania Commission Rehearing and Clarification Request at 12.

[557] Maryland Commission Rehearing and Clarification Request at 5-6, 24.

[558] Advanced Energy Entities Rehearing and Clarification Request at 5, 25.

[559] December 2019 Order, 169 FERC ¶ 61,239 at P 54 (finding that PJM has not provided a rationale for treating demand response and energy efficiency resources differently); *see supra* P 54 (finding that regardless of technology type, State-Subsidized Resources can impact capacity prices); 188 & n.446 (reiterating that the December 2019 Order established different default offer price floors for demand response resources backed by behind-the-meter generation and demand response resources backed by reduced consumption and that only revenue streams that fit within the definition of State Subsidy are implicated).

efficiency resources may participate in the capacity market even though they do not produce energy.[560] If parties believe that these resources should no longer qualify as capacity resources or be eligible to participate in PJM's capacity market, such a determination would be more appropriate in a new proceeding.

256. Parties have not demonstrated that demand response or energy efficiency resources do not have the same ability to affect prices as do generation resources simply because they do not produce energy. Moreover, while our analyses in the December 2019 Order amply support our findings there, we also note here that data made publicly available by PJM and the Market Monitor corroborate the Commission's findings in this regard.[561] Demand response and energy efficiency resource offers are not negligible;[562]

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[560] *See* PJM Reliability Assurance Agreement, Schedule 6 (Procedures for demand response and energy efficiency) available at: https://www.pjm.com/directory/merged-tariffs/raa.pdf; *see also PJM Interconnection L.L.C.*, 155 FERC P 61,157, at PP 51-52 (2016) (upholding aggregation of energy efficiency and demand response resources to enable them to meet Capacity Performance product requirements and participate in the capacity market).

[561] *See* 18 C.F.R. § 385.508(d) (2019). While we do not rely on this additional evidence for our determination, we nevertheless observe that it supports that determination.

[562] PJM maintains robust data documenting the participation of demand response and energy efficiency resources in the capacity market. A snapshot of PJM's data is presented in the table below. For the convenience of the reader, we have supplemented the Market Monitor's data—the columns denominated $ DR and $ EE are simply the arithmetic product of the column titled RTO-Wide Clearing Price and the columns denominated DR MW Total and EE MW Total, respectively.

| Delivery Year | UCAP Total | RTO-Wide Clearing Price | DR MW Total | % DR | $ DR | EE MW Total | % EE | $ EE |
|---|---|---|---|---|---|---|---|---|
| 2021-22 | 163,627 | $ 140.00 | 11,126 | 6.8 | $ 568,528,380 | 2,832 | 1.7 | $ 144,715,200 |
| 2020-21 | 165,109 | $ 76.53 | 7,820 | 4.7 | $ 218,450,752 | 1,710 | 1.0 | $ 47,771,786 |
| 2019-20 | 167,306 | $ 100.00 | 10,348 | 6.2 | $ 377,702,000 | 1,515 | 0.9 | $ 55,301,150 |
| 2018-19 | 166,837 | $ 164.77 | 11,084 | 6.6 | $ 666,627,455 | 1,247 | 0.7 | $ 74,965,819 |
| 2017-18 | 167,004 | $ 120.00 | 10,975 | 6.6 | $ 480,696,240 | 1,339 | 0.8 | $ 58,643,820 |
| 2016-17 | 169,160 | $ 59.37 | 12,408 | 7.3 | $ 268,884,147 | 1,117 | 0.7 | $ 24,211,947 |
| 2015-16 | 164,561 | $ 136.00 | 14,833 | 9.0 | $ 736,300,192 | 923 | 0.6 | $ 45,792,900 |
| 2014-15 | 149,975 | $ 125.99 | 14,118 | 9.4 | $ 649,253,684 | 822 | 0.5 | $ 37,805,378 |

*See* 2021/2022 RPM Base Residual Auction Results Report at 2, tbl. 1, 11 tbl. 3B, 19 tbl. 6 (May 23, 2018), www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx. The revenue values and percentage moreover, the Market Monitor has found that both energy efficiency and demand response resources have substantially affected revenues in the PJM capacity market.[563]

shares for demand response and energy efficiency resources are Commission estimates using the RTO-wide price and are not provided by PJM. To the extent that demand response and energy efficiency resources clear in a constrained zone, actual revenue for these resources increase.

[563] The Market Monitor publishes reports analyzing the results of each capacity auction, including the revenue effect of demand response and energy efficiency participation, as these resources were defined for the time periods examined. The results of those reports are summarized in the table below using the annual products as defined in those years to provide approximate and conservative results for comparison purposes:

| Delivery Year | Revenue Reduction | % Reduction |
|---|---|---|
| 2021-22 | $ 1,729,462,670 | 15.7 |
| 2020-21 | $ 1,083,640,882 | 13.5 |
| 2019-20 | $ 2,099,572,623 | 23.1 |
| 2018-19 | $ 3,217,132,975 | 22.7 |
| 2017-18 | $ 9,347,428,573 | 55.4 |
| 2016-17 | $ 10,117,362,259 | 64.7 |
| 2015-16 | $ 13,723,209,998 | 58.5 |

*See* Monitoring Analytics, *Analysis of the 2021/2022 RPM Base Residual Auction*: Revised, at 20 tbl. 1 at line 5 (Aug. 24, 2018), www.monitoringanalytics.com/reports/Reports/2018/IMM_Analysis_of_the_20212022_RPM_BRA_Revised_20180824.pdf; Monitoring Analytics, *Analysis of the 2020/2021 RPM Base Residual Auction*; at 17, tbl. 1, l. 4. (Nov. 17, 2017), http://www.monitoringanalytics.com/reports/Reports/2017/IMM_Analysis_of_the_20202021_RPM_BRA_20171117.pdf; Monitoring Analytics, *Analysis of the 2019/2020 RPM Base Residual Auction*, at 14, tbl 1, l. 5. (Aug. 31, 2016)**,** http://www.monitoringanalytics.com/reports/Reports/2016/IMM_Analysis_of_the_20192020_RPM_BRA_20160831-Revised.pdf; Monitoring Analytics, *Analysis of the 2018/2019 RPM Base Residual Auction Revised,* at 8 (Jul. 5, 2016), http://www.monitoringanalytics.com/reports/Reports/2016/IMM_Analysis_of_the_20182019_RPM_Base_Residual_Auction_20160706.pdf; Monitoring Analytics, *Analysis of the 2017/2018 RPM Base Residual Auction*, at 6 (Oct. 6, 2014), http://www.monitoringanalytics.com/reports/Reports/2014/IMM_Analysis_of_the_2017_2018_RPM_Base_Residual_Auction_20141006.pdf; Monitoring Analytics, *Analysis of the 2016/2017 RPM Base Residual Auction*, at 5 (Apr. 18, 2014), http://www.monitoringanalytics.com/reports/Reports/2014/IMM_Analysis_of_the_20162017_RPM_Base_Residual_Auction_20140418.pdf; Monitoring Analytics, *Analysis of the*

Therefore, demand response and energy efficiency resources receiving State Subsidies can, like generation resources, offer into the capacity market at a lower level than they would otherwise be able to if they did not receive that additional revenue, which can suppress prices. These below cost offers may affect the clearing price and quantity if the resource is marginal or inframarginal, regardless of the type of resource.

257. Parties argue that as a result of the way energy efficiency resources are modeled and added back, energy efficiency resources cannot suppress prices. PJM also argues that energy efficiency resources’ participation does not interfere with efficient and transparent price formation due to a lack of market penetration by these resources. We reject the contention that energy efficiency resources’ market participation cannot suppress prices. State Subsidies, if effective, will by their very nature increase the quantity of whatever is subsidized. State Subsidies to energy efficiency resources should result in additional energy efficiency resource participation. PJM's contention that energy efficiency resources’ participation does not interfere with efficient and transparent price formation due to a lack of market penetration by these resources is unpersuasive. Under PJM's current rules, energy efficiency resources permanently reduce demand for electricity. Decreased demand resulting from a State Subsidy will suppress prices just as a State Subsidy to supply will suppress prices. Mismatches between the demand reduction values reflected on the supply side and the demand side cause further distortions—an issue that can be resolved in a separate proceeding.

258. We also deny requests to exempt demand response resources from the expanded MOPR on the basis that subjecting these resources to the expanded MOPR may increase prices over time. Any such price increase would be just and reasonable because it would be the result of competitive market forces, as opposed to below cost offers.[564] With

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*2015/2016 RPM Base Residual Auction*, at 5 (Sept. 24, 2013), http://www.monitoringanalytics.com/reports/Reports/2013/Analysis_of_2015_2016_RPM_Base_Residual_Auction_20130924.pdf.

As the Market Monitor’s reports demonstrate, demand response resource participation in the wholesale energy and capacity markets reduces market revenues. Various parties may contest the exact extent of the capacity price reductions caused by demand response resource participation; however, there is ample evidence (including the Market Monitor’s reports) that demand response resource participation has a significant effect on the capacity market. *See generally* Demand Response Compensation in Organized Wholesale Energy Markets, NOPR, FERC Stats. & Regs. ¶ 32,656, at PP 4-5 (2010) (cross-referenced at 130 FERC ¶ 61,213).

[564] A well-designed market produces just and reasonable rates. *See, e.g., Md. Pub. Serv. Comm'n v. FERC*, 632 F.3d 1283 (D.C. Cir. 2011) (affirming Commission finding that competitive market produced just and reasonable prices); *see also* Order No. 719,

regard to the alleged benefits of demand response, those are not at issue in this proceeding, nor have parties demonstrated how such benefits would impact whether a resource is able to offer below cost as a result of a State Subsidy. The replacement rate is fuel neutral and we decline to consider any alleged externalities associated with demand response or energy efficiency resources.

259. We further deny the Pennsylvania Commission's request for rehearing to allow demand response or energy efficiency programs to demonstrate cost effectiveness under the Competitive Exemption. New and existing resources, other than new gas-fired resources, are eligible for the Competitive Exemption if they certify to PJM that they will forego any State Subsidies. However, any demand response resource with a State Subsidy may attempt to offer under the Unit-Specific Exemption.

260. We also decline to exempt energy efficiency resources on the basis that they focus on reduced consumption and conservation. As we found in the December 2019 Order, demand response resources have a similar focus and PJM has not provided sufficient rationale to treat these resource types differently with respect to the expanded MOPR.[565] Further, we have previously explained why low penetration is not a sufficient reason to exempt a resource type; out-of-market support at any level is capable of distorting capacity prices, and even small resources, on aggregate, may have the ability to impact capacity prices.

261. We reject EKPC's arguments that subjecting demand response to the MOPR will create market inefficiencies because it will prevent competitive resources from entering the capacity market and therefore limit PJM's visibility into those resources. The replacement rate does not bar competitive resources, but rather requires State-Subsidized Resources to demonstrate that they are, in fact, competitive, independent of the State Subsidy. Though there may be an increased burden to the resource to make this showing, that burden is outweighed by the benefits of preventing price suppression as a result of below cost offers from State-Subsidized Resources. We also reject arguments related to future demand response resource development. Our statutory obligation is to ensure just and reasonable rates, and parties have not presented any evidence that the PJM capacity

125 FERC ¶ 61,071 at P 18 ("The Commission has devoted considerable resources over the years to improve the market designs in each organized market to ensure that they produce just and reasonable rates."); *Market Monitoring Units in Regional Transmission Organizations and Independent System Operators*, 111 FERC ¶ 61,267, at P 3 (2005) ("Good market rules are essential to efficient wholesale markets in which competing suppliers have incentives to meet the customers' needs for reliable service at least cost.").

[565] December 2019 Order, 169 FERC ¶ 61,239 at P 54.

market will not produce just and reasonable rates unless we allow special exemptions to further future demand response growth.

262. With respect to EKPC's concern about whether a specific customer will be considered new, we decline to make determinations on specific resources here. We reiterate that any economic State-Subsidized Resource should be able to clear under the Unit-Specific Exemption.

263. We disagree that the Commission has not sufficiently explained the departure from prior precedent exempting demand response resources from the MOPR. First, the precedent Advanced Energy Entities refer to involves the MOPR as a means to address buyer-side market power. [566] The December 2019 Order left PJM's existing MOPR in place to address buyer-side market power.[567] The expanded MOPR, however, addresses price suppression as a result of State Subsidies, for which intent to suppress prices is not a factor. Therefore, the December 2019 Order does not depart from prior findings that demand response resources are a poor choice for entities intending to exercise buyer-side market power. However, under the expanded MOPR, any State-Subsidized Resource will be subject to the MOPR because all such resources have the ability to offer below their costs and, therefore, potentially suppress the clearing price, regardless of buyer-side market power.[568] Further, with regard to revenues from retail-level demand response programs for providing services distinct from those provided in the capacity market, the Commission has explained that "regional markets are not required to have the same rules. Our determination about what rules may be just and reasonable for a particular market depends on the relevant facts."[569] As we have explained in the orders throughout this proceeding, the record demonstrates a need to address the impact of State Subsidies on the PJM capacity market. We also reiterate that the replacement rate accommodates this

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[566] *See* NYISO SRC Order, 158 FERC ¶ 61,137 at P 30, *order on reh'g*, 170 FERC ¶ 61,120, at P 17 (2020) (reversing determination that a blanket exemption for demand responses resources was appropriate because an exemption does not recognize that some payments to demand response resources could provide them with the ability to reduce prices below competitive levels); *N.Y. Pub. Serv. Comm'n*, 153 FERC ¶ 61,022 at P 10 (finding that the market mitigation rules are appropriately applied to resources with the incentive and ability to exercise buyer-side market power).

[567] December 2019 Order, 169 FERC ¶ 61,239 at. P 42.

[568] *See, e.g.*, *id*. P 51.

[569] *Id*. P 204 n.431.

shift in expectations by exempting existing and limited new demand response resources from the expanded MOPR.[570]

264. With regard to the Maryland Commission's request regarding clarification on retail demand response programs, any demand response resources that participate in the PJM capacity market and receive, or are entitled to receive, State Subsidies, will be subject to the expanded MOPR. Therefore, all demand response program participants, whether they participate in the capacity market individually or through an aggregator, and regardless of their size, will be subject to the MOPR if they receive or are entitled to receive State Subsidies.

265. With respect to requests to provide clarification related to demand response aggregators and Curtailment Service Providers (CSPs), we clarify that these providers are eligible for the Demand Response, Storage, and Energy Efficiency Exemption if they meet the other requirements, as clarified below. With regard to the first criterion of the exemption, individual demand response resources will be considered to have cleared a capacity auction if they cleared either on their own (i.e., individually) or as part of an offer from an aggregator or CSP. An individual demand response resource can be a single retail customer. Aggregators and CSPs will be considered to have previously cleared a capacity auction only if all the individual resources within the offer have cleared a capacity auction either on their own (i.e., individually) or as part of an offer from an aggregator or CSP.

266. We acknowledge that the requirements of the replacement rate, including the application of the default offer price floor, may require aggregators and CSPs to know all of their demand response resource end-users prior to the capacity auction. This is necessary to ensure all State-Subsidized demand response resources are offering competitively, consistent with the December 2019 Order. With respect to arguments that this will harm the business model in some way, we reiterate that, to protect the integrity of the capacity market, it is necessary to ensure that no capacity resource is able to offer below its costs as a result of receiving, or being entitled to receive, a State Subsidy.

267. We deny the Pennsylvania Commission's request for rehearing on the basis that it would be burdensome for PJM to calculate minimum offers for demand response resources. As we find in Section IV.B.9 above, we are not persuaded that implementing the expanded MOPR will be unduly burdensome because, with over a decade of experience calculating competitive capacity cost-based offers, we find it unlikely that PJM or the Market Monitor will be overwhelmed with requests for Unit-Specific Exemptions. Indeed, the Market Monitor has not voiced any such concern.

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[570] *Id*. P 208.

### 4. RPS Exemption

#### a. Arguments Against Mitigating RPS Resources

##### i. Requests for Rehearing or Clarification

268. The DC Commission argues that new renewable resources, unsure how they will be impacted by the MOPR, may raise their offers, resulting in higher costs for customers in RPS states[571] and that applying the MOPR to renewable resources participating in state RPS programs may prevent states from meeting their goals, averring that new renewable resources should also be exempt.[572]

269. The Illinois Attorney General claims that payments from RPS programs should not be subject to the MOPR because the record shows that the effects of these programs have already been incorporated into the capacity market since its inception, and therefore they cannot reasonably be considered to have prevented or delayed retirement of inefficient resources or unduly suppressed prices.[573] The Maryland Commission argues the Commission does not explain its conclusion that renewable resources' prior little impact on clearing prices and limited quantity of RPS resources is irrelevant, even though the amount of renewables that cleared the 2020/2021 BRA was de minimis.[574] Clean Energy Associations argue that RECs are not a driver for whether a renewable energy project is financed or built and have little impact on a renewable project owner's operational choices because a market seller cannot lower its capacity market offer in anticipation of an unknown REC value. Therefore, Clean Energy Associations argue, RECs do not have a price suppressive impact on the capacity market.[575] Buyers Group argues that the expanded MOPR should only be applied to capacity resources developed with the express purpose of satisfying the off-taker's compliance with a state-mandated or state-sponsored procurement process and should not apply to resources developed for

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[571] DC Commission Rehearing and Clarification Request at 7.

[572] *Id*. at 8.

[573] Illinois Attorney General Rehearing Request at 5-7; *see also* Clean Energy Associations Rehearing and Clarification Request at 33.

[574] Maryland Commission Rehearing and Clarification Request at 21.

[575] Clean Energy Associations Rehearing and Clarification Request at 32-34 (citing Initial Testimony of the American Wind Energy Association, the Solar RTO Coalition, the Mid-Atlantic Renewable Energy Coalition, and Solar Energy Industries Association at 13-17 (filed Oct. 2, 2018); Advanced Energy Economy Initial Testimony at 10-14 (filed Oct. 2, 2018)).

voluntary purposes or that intend to sell RECs on the open market. Buyers Group explains that renewable resources typically know how their RECs will initially be used, by nature of agreements with off-takers, but do not have visibility into how the RECs will ultimately be used over the lifetime of the project.[576]

### b. Commission Determination

270. We deny rehearing requests regarding the RPS Exemption. We reject the DC Commission's arguments that new renewable resources should not be subject to mitigation because such mitigation may raise costs for customers in RPS states or make it more difficult for states to meet their goals. The replacement rate does not deprive states in the PJM region of jurisdiction over generation facilities because states may continue to support their preferred resource types in pursuit of state policy goals.[577] We also reiterate that courts have directly addressed the question of increasing costs to consumers, holding that states "are free to make their own decisions regarding how to satisfy their capacity needs, but they 'will appropriately bear the costs of [those] decision[s],' . . . including possibly having to pay twice for capacity."[578]

271. We also reject the Illinois Attorney General's argument that RPS payments cannot impact a resource's decision to retire or suppress prices. This argument runs counter to basic logic that a resource receiving a State Subsidy has additional revenue that otherwise similarly situated resources do not, and therefore needs less money from the capacity market. Such resources will be able to offer lower and remain in the market longer than their unsubsidized counterparts.[579]

272. With respect to the arguments presented by the Maryland Commission and Clean Energy Associations regarding whether the Commission acted on sufficient evidence in determining that RPS programs have the ability to impact prices, these are untimely requests for rehearing of the June 2018 Order. However, for clarity, we reiterate here that the June 2018 Order found that increasing support for RPS programs "is significant

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[576] Buyers Group Clarification and Rehearing Request at 11-12.

[577] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 7, 41; June 2018 Order, 163 FERC ¶ 61,236 at PP 158-59.

[578] *See e.g.*, December 2019 Order, 169 FERC ¶ 61,239 at P 41 (citing *NJBPU*, 744 F.3d at 96-97 (quoting *Connecticut PUC*, 569 F.3d at 481)).

[579] *See* December 2019 Order, 169 FERC ¶ 61,239 at P 72; June 2018 Order, 163 FERC ¶ 61,236 at P 155 (citing 2011 ISO-NE MOPR Order, 135 FERC ¶ 61,029 at PP 170-71).

enough to affect the price in the market, and therefore the entry and exit of resources."[580] Economic theory supports that, in a market based on the clearing price of the incremental unit, the addition of subsidized supply offering based on an artificially low cost may reduce clearing prices.[581] We also reject Clean Energy Association's argument that RPS programs cannot impact clearing prices because a market participant cannot know the value of the RECs it will receive in advance of the auction. First, it would undermine the purpose of the December 2019 Order to allow resources that are currently receiving State Subsidies or plan to accept State Subsidies in the form of RPS or REC revenue to offer into the capacity market unmitigated, as though they were not accepting that subsidy. Second, we disagree that the knowledge of future State Subsidies cannot impact a market participant's offer. The capacity market is a forward market and all sellers must craft their offers around future expectations. There is no evidence in the record to suggest that renewable resource owners do not formulate their offers based on expectations of future revenue and costs as do other resource types. However, should a market participant believe that RPS or REC revenues will not impact its offer, the market participant may either certify that it will forego any State Subsidy and offer unmitigated through the Competitive Exemption or request the Unit-Specific Exemption to justify its offer.

273. We further reject Buyers Group's argument that the MOPR should only apply to resources that are developed for the purpose of satisfying the off-taker's compliance with a state-mandated or state-sponsored procurement process. Buyers' Group proposal would provide a gaming opportunity, as a resource initially developed for a different purpose, such as for the purpose of providing voluntary RECs, is under no obligation to continue to do so throughout its life.

### c. Eligibility for the RPS Exemption

#### i. Requests for Rehearing and Clarification

274. Several parties request rehearing or clarification regarding what constitutes a renewable resource for the purposes of determining eligibility for the RPS Exemption. Delaware DPA requests the Commission clarify or find on rehearing that the RPS Exemption should apply to any resource that was, as of December 19, 2019, eligible to provide RECs, Solar RECs, or REC/Solar REC equivalencies under any state RPS program.[582] Delaware DPA further states that the December 2019 Order limited the exemption to intermittent resources, but that not all renewable resources meet that definition, including geothermal energy, biomass generators, landfill gas generators, and

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[580] June 2018 Order, 163 FERC ¶ 61,236 at P 151.

[581] *See, e.g.*, *id*. P 155.

[582] Delaware DPA Clarification and Rehearing Request at 2, 6.

fuel cells.[583] According to Delaware DPA, the Tariff definition of intermittent resources to which the December 2019 Order cites is focused on operational intermittency and not necessarily renewable attributes.[584] Delaware DPA contends that the Commission should grant this clarification or rehearing because states relied on established precedent to craft their RPS programs, including the reservation of state jurisdiction in the FPA,[585] the Supreme Court's findings that states have reserved authority over generation facilities and retain the authority to develop new or clean generation so long as state actions do not disregard or interfere with a Commission-jurisdictional wholesale rate, and prior Commission orders.[586]

275. The Market Monitor requests clarification as to whether landfill gas is a renewable resource for the purposes of the December 2019 Order. The Market Monitor explains that the December 2019 Order defined renewable as intermittent, and PJM Manual 18 identifies landfill gas as an intermittent resource.[587]

276. Consumer Representatives ask the Commission to clarify that all existing renewable resources are eligible for the RPS Exemption even if the resource does not qualify under PJM's definition of intermittent because all existing renewable resources relied on prior Commission orders that they would be exempt.[588] Moreover, Consumer Representatives contend that states and resources were not on notice prior to the December 2019 Order that only a subset of renewable resources that have qualified for years under state RPS programs would not be exempt from the MOPR.[589]

277. Several parties also request rehearing of what constitutes an existing resource for the purposes of eligibility for the RPS Exemption. Clean Energy Associations argue that significant investment decisions were made by projects who, although also guided by the Commission's prior precedent, do not meet the criteria set forth in the RPS Exemption,

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[583] *Id*. at 9-12; *see* Maryland Commission Rehearing and Clarification Request at 12.

[584] Delaware DPA Clarification and Rehearing Request at 9-10 (contending that renewable resources did not have notice they would be subject to the MOPR).

[585] Delaware DPA Clarification and Rehearing Request at 11.

[586] *Id*. at 11-12 (citing *Hughes*, 136 S. Ct. at 1296).

[587] Market Monitor First Clarification Request at 6.

[588] Consumer Representatives Rehearing and Clarification Request at 29-30.

[589] *Id*. at 30.

and therefore request that the Commission revise the December 2019 Order to afford an RPS Exemption to (1) any planned generation capacity resource or existing generation capacity resource as of December 19, 2019, under PJM's Reliability Assurance Agreement and (2) any resource that executed a System Impact Study Agreement or functional equivalent by December 19, 2019.[590] Clean Energy Associations explain that resources under (1) above are deemed to be sufficiently advanced so as to be eligible to participate in capacity market auctions, even if they have not executed final interconnection agreements or are not yet operational.[591]

278. AES requests that the Commission expand this exemption on rehearing to apply to any renewable resource for which a power purchase agreement is executed. AES argues this may be a more important indicator because the power purchase agreement provides a cash flow projection that can be important to getting financing to build. AES argues that interconnection construction service agreements, in contrast, are essentially mandated by PJM.[592] OPSI asserts that the criteria identified in the December 2019 Order are not reflective of the range of plans for resources to become operational pursuant to state policy goals.[593] OPSI argues that any state procurement actions completed prior to issuance of the December 2019 Order should be included among the exemption criteria.[594] AEP/Duke seek clarification that existing capacity resources that are exempt pursuant to the RPS Exemption remain exempted for the life of the resource.[595] AEP/Duke assert that it is arbitrary and capricious for a resource's eligibility for the RPS Exemption to be subject to changes as a result of future state law modification.[596]

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[590] Clean Energy Associations Rehearing and Clarification Request at 52-54.

[591] *Id*. at 53.

[592] AES Rehearing and Clarification Request at 12-13.

[593] OPSI Rehearing and Clarification Request at 11.

[594] *Id*. at 11 (seeking existing status for resources built pursuant to legislation enacted prior to the December 2019 Order, accommodated by a state regulatory commission order related to the prospective construction and operation of a renewable resource or the issuance of RECs issued prior to the December 2019 Order, or built pursuant to a commercial contract executed prior to the December 2019 Order); *see also* Maryland Commission Rehearing and Clarification Request at 5, 23.

[595] AEP/Duke Rehearing and Clarification Request at 4.

[596] *Id*. at 4, 15-18.

### ii. Commission Determination

279. We grant clarification that the resources eligible for the RPS Exemption include all existing resources that were included by an RPS standard as of the December 2019 Order. As we explained, decisions to invest in RPS resources were guided by our previous affirmative determinations.[597] Thus we grant Delaware DPA's specific request regarding the eligibility of existing resources eligible to provide RECs, Solar RECs, or REC/Solar REC equivalencies under any state RPS program.

280. We deny all requests to expand what constitutes an existing resource for the purposes of the RPS Exemption, with the exceptions as detailed above (IV.D.1).[598] We deny Clean Energy Associations' request to expand eligibility for the RPS Exemption to any planned or existing generation capacity resource under PJM's Reliability Assurance Agreement or any resource that has executed a System Impact Study Agreement. The Reliability Assurance Agreement considers resources to be planned depending on various factors, including whether interconnection service has commenced; any required agreements or documentation such as System Impact Study Agreements, Facilities Study Agreements, and Interconnection Service Agreements executed; and whether any MWs of capacity have previously cleared an auction.[599] System Impact Study Agreements and Facilities Study Agreements are executed early in the interconnection queue process and bind market participants only to the cost of the study. They do not require market participants to continue through the process and ultimately interconnect. Further, System Impact Study Agreements and Facilities Study Agreements neither confer interconnection rights nor bind the market participant to funding interconnection facilities. Therefore, we find that resources at the study phase are not sufficiently developed to warrant the categorical exemptions. With respect to the other aspects of planned and existing resources as defined by the Reliability Assurance Agreement, those are already captured by the exemptions herein.

[597] December 2019 Order, 169 FERC ¶ 61,239 at P 174 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 166-167; 2011 MOPR Order, 135 FERC ¶ 61,022 at PP 152-153; 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 111).

[598] We pause to note that, as the capacity market has developed, an ever-growing number of resource types have come to participate in the market that were not contemplated. This proceeding has focused on establishing just and reasonable rates in the capacity market but does not necessarily resolve issues regarding whether, to what extent, and under what terms resources that are not able to produce energy on demand should participate in the capacity market consistent with the Commission's mandate to ensure the reliability of the electric system.

[599] PJM Reliability Assurance Agreement, Art. 1 – Definitions.

281. Similarly, we deny requests to expand the exemption to apply to any renewable resource for which a power purchase agreement has been executed or that is being developed pursuant to a commercial contract. Market participants may be party to these types of agreements without having made sufficient investments to either be committed to funding construction costs through PJM or being awarded interconnection rights. Power purchase agreements and commercial contracts are not unique to renewable resources, and parties have not provided any reason why renewable resources should be treated differently than other resources. Interconnection service agreements are necessary as part of the interconnection process. Using these agreements as the cutoff point to determine eligibility for the exemptions therefore ensures all resource types are treated equitably.

282. Further, we deny OPSI and the Maryland Commission's requests to base eligibility for the RPS Exemption on whether the resources are built pursuant to existing legislation or otherwise anticipated by the state before the date of the December 2019 Order. As we explained in the December 2019 Order, this limited exemption for resources participating in RPS programs is just and reasonable because decisions to invest in those resources were guided by our previous affirmative determinations that renewable resources had too little impact on the market to require review and mitigation.[600] However, that assessment of renewable resource participation in the market has changed and market participants are now on notice that any new State-Subsidized renewable resources will be subject to the MOPR.[601] Future investment in renewable resources intending to participate in the capacity market should be guided by this new precedent.

283. We grant AEP/Duke's request for clarification that existing capacity resources that are exempt pursuant to the RPS Exemption remain exempt for the life of the resource, subject to the requirements associated with uprates, per the description of the RPS Exemption in the December 2019 Order.[602] Should the state modify its RPS program, the resource retains its existing status. However, as discussed in the December 2019 Order and clarified in this order, any uprates to an existing generation capacity resource will be

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[600] December 2019 Order, 169 FERC ¶ 61,239 at P 174 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 166-167; 2011 MOPR Order, 135 FERC ¶ 61,022 at PP 152-153; 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 111).

[601] *Id*. P 174.

[602] *Id*. P 173.

considered new for the purposes of the MOPR, regardless of whether the underlying resource has previously been exempt as an existing resource.[603]

### 5. Unit-Specific Exemption

#### a. Request for Rehearing or Clarification

284. Clean Energy Associations argue that, in order to allow for truly competitive offers under the Unit-Specific Exemption, the Commission must permit any seller to utilize any appropriate method or inputs that will reflect actual, accurate, and competitive offers from their resources, including but not limited to the use of the Net ACR method.[604]

285. Clean Energy Associations assert that it is unreasonable to apply the same capital cost assumptions to planned natural gas-fired resources and planned renewable resources, such as a standardized useful life of 20 years, when renewable resources routinely and reasonably assume a useful life of between 30-40 years, asserting that capital cost assumptions for each default resource type must be based on realistic assumptions for renewable facilities, which may have lower capital costs than other resources due to bonus depreciation and federal incentives from the Investment Tax Credit and Production Tax Credit.[605]

286. Clean Energy Advocates argue that the Unit-Specific Exemption will still exclude excessive amounts of capacity from participating in the capacity market and that it is a time-consuming and costly process that serves as an unwarranted barrier for new resources.[606] Clean Energy Advocates argue that, as a result, resources whose unit-specific offer price floor would allow them to clear the market might be dissuaded from participating in the capacity market in the first place, with this burden falling most heavily on smaller projects that cannot afford the expense and uncertainty of unit-specific review.[607] Clean Energy Associations argue that PJM will be inundated with Unit-

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[603] *Id*. P 149.

[604] Clean Energy Associations Rehearing and Clarification Request at 48.

[605] *Id*. at 49 (citing Comments of the American Wind Energy Association, the Solar RTO Coalition, the Mid-Atlantic Renewable Energy Coalition and the Solar Energy Industries Association, Docket No. EL18-187-000, at 2 (Oct. 2, 2018)).

[606] Clean Energy Advocates Rehearing Request at 82-84 (calculating unit-specific offer price floors is burdensome, unpredictable, and costly for applicants).

[607] *Id*. at 84.

Specific Exemption requests, opining that PJM and the Market Monitor might not have the resources necessary to undertake the process.[608]

287. PJM states that the December 2019 Order directs PJM to retain the Unit-Specific Exemption, but states that such requests will be "subject to approval by the Market Monitor."[609] PJM requests that the Commission confirm that the December 2019 Order did not intend to alter the current collaborative approach for unit-specific review, under which the Market Monitor may review and make recommendations regarding requests for unit-specific review, but only PJM or the Commission may approve or deny such a request.[610]

288. J-POWER requests that the Commission clarify that a resource that has already obtained a unit-specific exception under PJM's existing Tariff for the 2022/2023 delivery year is not required to re-apply for the Unit-Specific Exemption described in the December 2019 Order, but has the option of doing so to update its cost information.[611]

### b. <u>Commission Determination</u>

289. We deny rehearing requests and continue to find the Unit-Specific Exemption, expanded to cover existing and new State-Subsidized Resources of all resource types, operates as an important safety valve that will help avoid over-mitigation of resources that demonstrate their offers are economic based on a rational estimate of their expected costs and revenues without reliance on out-of-market financial support through State Subsidies.[612] Additionally, we remain unpersuaded that the Unit-Specific Exemption, a feature of PJM's existing Tariff, is unduly burdensome. PJM and its Market Monitor have been calculating competitive capacity cost-based offers for over a decade.[613] If PJM and the Market Monitor are flooded with requests for unit-specific review, they can allocate additional personnel to perform this task. And, for any market participant that

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[608] Clean Energy Associations Rehearing and Clarification Request at 27.

[609] PJM Rehearing and Clarification Request at 24 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 214).

[610] PJM Rehearing and Clarification Request at 24-25 (citing PJM OATT, Attach. DD, § 5.14(h)(5)(iv)); *see also* Public Power Entities Rehearing and Clarification Request at 53-55.

[611] J-POWER Clarification Request at 2.

[612] December 2019 Order, 169 FERC ¶ 61,239 at PP 16, 214.

[613] *See* PJM OATT, § 12A.

considers the process of obtaining a Unit-Specific Exemption too onerous, the default offer price floor for each resource type remains available, in addition to the Competitive Exemption if a resource declines to take a State Subsidy it is eligible to receive.[614]

290. As to Clean Energy Advocates' assertion that it is unreasonable to apply the same capital cost assumptions to planned natural gas-fired resources and planned renewable resources, we disagree. As we found in the December 2019 Order, default offer price floors should maintain the same basic financial assumptions, such as the 20-year asset life, across resource types.[615] The Commission has previously determined that standardized inputs are a simplifying tool appropriate for determining default offer price floors,[616] and we reaffirm that it is reasonable to maintain these basic financial assumptions for default offer price floors in the capacity market to ensure resource offers are evaluated on a comparable basis.

291. We grant PJM's request for clarification. The reference to the Market Monitor's approval was merely meant to recognize the Market Monitor's role in reviewing the offers, not to modify that role, or usurp PJM or the Commission's role, in approving or denying requests for Unit-Specific Exemptions.

292. We also grant J-POWER's request for clarification. If a market participant has already received a unit-specific exception for a resource under the currently existing Tariff and MOPR for the BRA for delivery years 2022/2023, it is not necessary to reapply. Given the delay in the auction, we further find that it is reasonable to allow market participants that wish to update the information in their application to do so.

### 6. <u>Competitive Exemption</u>

#### a. <u>Requests for Rehearing or Clarification</u>

293. Parties argue that the Competitive Exemption is not just and reasonable because it did not include an exemption for State Subsidies procured through competitive processes.[617] The Illinois Commission argues that the Competitive Exemption should include a competitiveness test, as did the 2013 competitive entry exemption on which the

[614] December 2019 Order, 169 FERC ¶ 61,239 at P 216.

[615] *Id*. P 153.

[616] 2013 MOPR Order, 143 FERC ¶ 61,090 at P 144.

[617] Illinois Commission Rehearing Request at 24-25; Clean Energy Associations Rehearing and Clarification Request at 16; PJM Rehearing and Clarification Request at 7-9.

December 2019 Order states the Competitive Exemption is based.[618] Clean Energy Associations contend that the December 2019 Order presented no evidence for subjecting State Subsidies procured via competitive processes to the MOPR, arguing that if a resource competed in a state program, the State Subsidy was competitively obtained, resulted from competitive market dynamics, and should not be subject to the MOPR.[619] PJM contends that the December 2019 Order never explained why the Commission no longer believes the competitive entry exemption is just and reasonable.[620]

294. Consumers Coalition argue that the Competitive Exemption is unjust, unreasonable and unduly discriminatory because it is only available to resources foregoing State Subsidies, which include revenue earned through competitive state clean energy procurement programs, but not revenue from comparable fuel-neutral procurements, citing as examples PJM's competitive procurement for black start or ancillary services.[621]

295. The Pennsylvania Commission argues the Commission acted arbitrarily and capriciously by denying the Competitive Exemption to natural gas-fired resources, including those not receiving a State Subsidy, because market performance of all natural gas-fired resources demonstrates there is no reason not to permit such resources to use the Competitive Exemption. The Pennsylvania Commission contends that the Commission ignored evidence that Net CONE for these resources is overstated, because annual capacity auction prices over the last five years were only 34% of the combined cycle default offer price floor where combined cycle represents the marginal technology in the supply stack.[622] In addition, the Pennsylvania Commission argues that annual capacity auction prices for the five years during which the competitive entry exemption was in place for natural gas-fired resources show no evidence of price suppression, nor has any party presented evidence that the exemption allowed for price suppression. The Pennsylvania Commission concludes that imposing the MOPR on resources receiving no

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[618] Illinois Commission Rehearing Request at 24-25 (citing December 19 Order, 169 FERC ¶ 61,239 at PP 15, 73; 2013 MOPR Order, 143 FERC ¶ 61,090 at P 56); *see also* ELCON Rehearing Request at 10 (arguing that the Commission does not justify applying the MOPR to payments as a result of competitive processes).

[619] Clean Energy Associations Rehearing and Clarification Request at 16.

[620] PJM Rehearing and Clarification Request at 7-9.

[621] Consumers Coalition Rehearing Request at 41 (citing December 2019 Order, 169 FERC ¶ 61,239 at PP 73-74).

[622] Pennsylvania Commission Rehearing and Clarification Request at 9.

subsidies imbues an anti-competitive bias on a class of generators rather than promoting competition.[623]

296. The Pennsylvania Commission also argues the Commission acted arbitrarily and capriciously by finding without justification that resources whose primary purpose is not electricity production should not be eligible for the Competitive Exemption.[624] The Pennsylvania Commission contends that, as a result of applying a MOPR to "these unsubsidized resources," PJM would need to evaluate the value of residual steam and resiliency associated with these investments, "thereby further burdening the development of this sector."[625]

297. Parties argue that the Commission's proposal that a new resource that claims the Competitive Exemption in its first year, then subsequently elects to accept a State Subsidy, may not participate in the capacity market from that point forward for a period of years equal to the applicable asset life that PJM used to set the default offer price floor in the auction that the new asset first cleared is overly punitive.[626] Clean Energy Associations assert that the proposal has not been justified as being proportional to the alleged harm caused, because resources may have several decades of useful life during which market conditions may radically change.[627] Dominion proposes that a more reasonable approach would be to limit the penalty to a period of years, or in the alternative, prohibit the resource from participating in the auction for the remaining number of years in the assumed asset life.[628] Consumers Coalition argue that there is no reason to treat new and existing resources differently and the draconian measure of prohibiting a new resource from the capacity market for decades if it later decides to take a subsidy is not warranted, nor does the Commission explain why a less harsh penalty would not deter gaming.[629]

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[623] *Id*. at 9-10.

[624] *Id*. at 10.

[625] *Id*.

[626] Dominion Rehearing and Clarification Request at 9, 25-26; Consumers Coalition Rehearing Request at 41; Illinois Commission Rehearing Request at 25.

[627] Clean Energy Associations Rehearing and Clarification Request at 55-56.

[628] Dominion Rehearing and Clarification Request at 26.

[629] Consumers Coalition Rehearing Request at 41.

298. The Pennsylvania Commission requests the Commission find that a resource that agrees to forego annual REC revenues in any given delivery year should be eligible to offer into capacity auctions corresponding to that delivery year without being subject to the MOPR.[630] The Pennsylvania Commission argues that this will provide an ongoing incentive for previously subsidized resources to forego out-of-market revenues and enhance competition, while mitigating double procurement of capacity.[631]

299. Parties also seek clarification as to whether electric cooperatives are categorically barred from using the Competitive Exemption as a result of their business model.[632] NRECA/EKPC assert that categorically barring electric cooperatives would be unreasonable and request the Commission clarify that an electric cooperative may avail itself of the Competitive Exemption.[633] EKPC argues that the Commission should clarify that PJM may review the circumstances of each electric cooperative when determining whether to grant a Competitive Exemption.[634] EKPC further argues that, from a policy standpoint, categorically denying electric cooperatives the ability to pursue the Competitive Exemption will negatively impact the existing market and hamper future prospects of growing the PJM wholesale market to include new territories.[635] Without granting clarification, EKPC states, electric cooperatives face the prospect of paying twice for capacity.[636]

300. J-POWER requests the Commission clarify that the December 2019 Order was not intended to preclude or prejudge any future filings, whether under section 205 or section 206 of the FPA, to extend the Competitive Exemption to any new gas-fired resource that meets the requirements for such exemption.[637] The Market Monitor requests the

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[630] Pennsylvania Commission Rehearing and Clarification Request at 13-14.

[631] *Id*. at 14.

[632] EKPC Rehearing and Clarification Request at 9-11; NRECA/EKPC Clarification and Rehearing Request at 22-23; *see also* IMEA Clarification and Rehearing Request at 11-16 (arguing that it is unduly discriminatory that public power cannot elect the Competitive Exemption).

[633] NRECA/EKPC Clarification and Rehearing Request at 23.

[634] EKPC Rehearing and Clarification Request at 9.

[635] *Id*. at 10.

[636] *Id*.

[637] J-POWER Clarification Request at 8.

Commission clarify that the Competitive Exemption only applies to resources receiving or entitled to receive a State Subsidy that certify they will forego the State Subsidy.[638]

**b. <u>Commission Determination</u>**

301. We deny rehearing requests seeking to include an exemption for state competitive procurement processes. Although, as parties point out, the Commission previously approved an exemption for competitive, non-discriminatory state procurement processes proposed by PJM in 2013,[639] we do not believe such an exemption is necessary for a just and reasonable replacement rate here. The purpose of the expanded MOPR is to ensure that resources participating in the capacity market with the benefit of State Subsidies do not suppress capacity market prices by offering lower than their costs. Under these circumstances, subjecting all State-Subsidized Resources to the expanded MOPR ensures that subsidized resources do not have the ability to affect competitive price signals and protects capacity market integrity. An exemption for competitive procurement processes is not necessary because if a State-Subsidized Resource is truly competitive, the resource can use the Unit-Specific Exemption to offer less than the default offer price floor for its resource type.[640] Thus, a resource has the opportunity to demonstrate its costs are competitive and participate in PJM's capacity auction at less than Net CONE or Net ACR, while also protecting market integrity.

302. We deny the Pennsylvania Commission's request to extend the Competitive Exemption to new natural gas-fired resources, whether State Subsidized or not. To the extent the Pennsylvania Commission argues that the existing MOPR is unjust and unreasonable without a competitive entry exemption, we disagree. For the reasons discussed above, we decline to include an exemption for competitive processes, similar to the prior competitive entry exemption. Further, as we found in the December 2019 Order, the record did not demonstrate a need to eliminate or modify application of the existing MOPR to new natural gas-fired resources, which applied, and thus will continue to apply, regardless of whether they receive State Subsidies. The Pennsylvania Commission provides no evidence to suggest that the existing MOPR should be changed, or that natural gas-fired resources are no longer likely to be used to exercise buyer-side market power. The Pennsylvania Commission's argument that PJM has not calculated Net CONE accurately for new natural gas-fired resources, even if true, does not demonstrate that natural gas-fired resources are no longer likely to be used for buyer-side market power or that new natural-gas fired resources should be permitted to use the Competitive Exemption, only that Net CONE may need to be re-evaluated (we address those claims in

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[638] Market Monitor Second Clarification Request at 2-3.

[639] *See* 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 53-54.

[640] December 2019 Order, 169 FERC ¶ 61,239 at P 73.

Section IV.C.). Further, we find the Pennsylvania Commission's claims that capacity prices were not suppressed during the years the competitive entry exemption was in place to be irrelevant. Even if the Pennsylvania Commission had demonstrated that prices were not suppressed by resources exercising buyer-side market power during the years the competitive entry exemption was in place, which it did not, that would fail to show that new natural gas-fired resources should be permitted to use the Competitive Exemption. The Competitive Exemption is available to those resources subject to the default offer price floors based on the receipt of a State Subsidy. New natural gas-fired resources are subject to the default offer price floors because they are the resources most likely to exercise buyer-side market power, not based on the receipt of a State Subsidy. Finding that new natural gas-fired resources cannot use the Competitive Exemption is thus the logical conclusion and does not create anti-competitive effects on new natural gas-fired resources, which still may use the Unit-Specific Exemption to demonstrate competitiveness.

303. With regard to the Pennsylvania Commission's argument that the Commission acted arbitrarily and capriciously by finding without justification that resources whose primary purpose is not electricity production should not be eligible for the Competitive Exemption, the Pennsylvania Commission appears to misunderstand the findings in the order. The December 2019 Order did not bar such resources from the Competitive Exemption. We clarify that any new or existing resource, other than new natural gas-fired resources, may certify to PJM that they will forego any State Subsidies in the Competitive Exemption.[641] However, resources whose primary purpose is not electricity production will be subject to the MOPR if they receive, or are eligible to receive, a State Subsidy and do not qualify for an exemption.[642]

304. We also deny requests for rehearing regarding the December 2019 Order's finding that if a new resource claims the Competitive Exemption in its first year, then subsequently elects to accept a State Subsidy, that resource may not participate in the capacity market from that point forward for a period of years equal to the applicable asset life that PJM used to set the default offer price floor in the auction that the new asset first cleared.[643] As a threshold matter, we are not required to evaluate the replacement rate against every other potential replacement rate, nor to choose the most just and reasonable rate.[644] As we explained in the December 2019 Order, there is a loophole whereby a

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[641] *Id*. P 161.

[642] *Id*. P 51.

[643] *Id*. P 162.

[644] *See, e.g.*, *Emera Maine*, 854 F.3d at 23 (stating that "because statutory reasonableness 'allows a substantial spread' of potentially reasonable rates, a court has no authority to fix a rate different from the one chosen by FERC 'on the ground that, in its

resource may not be eligible for a State Subsidy at the time of the capacity market qualification process, but may become eligible for such a subsidy, and accept it, before or during the relevant delivery year.[645] The consequence of such gaming is especially significant with respect to new resources, which would have faced a higher default offer price floor. A market participant could disclaim a State Subsidy its first year, in order to clear the market at an unmitigated offer below its costs, knowing it could accept that State Subsidy every other year of its useful life to make up for any losses sustained that first year. Alternatively, if the new resource clears the market subject to the default offer price floor appropriate to a new resource of that type, it has been demonstrated to be economic independently of the State Subsidy. The risk of market harm involved in a new resource gaming the MOPR in this way is therefore much higher than for an existing resource. Therefore, it is just and reasonable both to use such a high penalty for new resources and to treat new and existing resources differently for the purposes of the Competitive Exemption.

305. For the above reasons, we also deny the Pennsylvania Commission's request to exempt RPS resources from these gaming provisions. We find that a potential incentive for resources that have previously received State Subsidies to no longer accept them is not sufficient to overcome the market harm that would result if new resources were allowed to bypass the expanded MOPR by entering into the capacity market as though they were competitive and then subsequently accept a State Subsidy.

306. With regard to electric cooperatives, electric cooperatives receive State Subsidies by definition[646] and therefore do not qualify for the Competitive Exemption. We reject arguments that not exempting electric cooperatives will harm efforts to expand PJM

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opinion, it is the only or the more reasonable one.'") (quoting *Montana-Dakota Util. Co. v. Nw. Pub. Serv. Co.*, 341 U.S. 246, 250-52 (1951)).

[645] December 2019 Order, 169 FERC ¶ 61,239 at P 162.

[646] Namely, the State Subsidy definition states that any "direct or indirect payment, concession, rebate, subsidy, non-bypassable consumer charge, or other benefit that is (1) a result of any action, mandated process, or sponsored process of . . . *an electric cooperative*, and that is (2) derived from or connected to the procurement of (a) electricity or electric generation sold at wholesale interstate commerce, or (b) an attribute of the generation process for electricity or electric generation capacity sold at wholesale in interstate commerce, or (3) will support the construction, development or operation of a new or existing resource, (4) or could have the effect of allowing a resource to clear in any PJM capacity auction." *Id*. P 67. (emphasis added).

markets to new territories as immaterial. We have repeatedly addressed arguments regarding paying twice for capacity and therefore reject that argument again here.[647]

307. We clarify the December 2019 Order did not prejudge any future filings or alter any FPA section 205 or 206 filing rights. Finally, we clarify that the Competitive Exemption is available to State-Subsidized Resources receiving or entitled to receive a State Subsidy that certify they will forego the State Subsidy.[648] However, all resources seeking to employ the Competitive Exemption must certify whether or not they receive, or are entitled to receive, a State Subsidy.

## E. Undue discrimination

### 1. Rehearing and Clarification Requests

308. Parties argue that the December 2019 Order treats existing nuclear resources differently from other existing resources and is thus unduly discriminatory.[649] NEI and Exelon argue that it is arbitrary and capricious to exempt existing RPS and self-supply resources on the rationale that these resources were previously exempt and to preserve existing investment decisions, but not exempt resources receiving ZECs, which have also made significant investments in light of their expectations that they would not be subject to the MOPR.[650] For example, Exelon states that it made capital investments in the Quad Cities nuclear plant against the backdrop of market rules that had not previously applied the MOPR to existing nuclear resources.[651] Exelon insists that there is no economic justification for distinguishing between groups of existing resources, pointing to the Commission's statement that self-supply resources may have the ability to suppress

[647] *See, e.g.*, December 2019 Order, 169 FERC ¶ 61,239 at P 41.

[648] *See* Market Monitor Second Clarification Request at 2-3.

[649] *See, e.g.*, Exelon Rehearing and Clarification Request at 8, 28-29; NEI Rehearing Request at 12-13; FES Rehearing Request at 18-19; Consumer Representatives Rehearing and Clarification Request at 24; Ohio Commission Rehearing Request at 16.

[650] NEI Rehearing Request at 12-13; Exelon Rehearing and Clarification Request at 28-29; *see also* PSEG Rehearing Request at 5, 12-14; Illinois Commission Rehearing Request at 11; Ohio Commission Rehearing Request at 16-17; FES Rehearing Request at 18-19.

[651] Exelon Rehearing and Clarification Request at 28-29 (concluding that affording an exemption for existing self-supply resources while denying that exemption for other existing resources receiving state support provides the competitive advantage that the Commission finds illicit).

prices going forward. Exelon contends that exempting existing self-supply resources, while denying an exemption for existing nuclear resources, affords self-supply a competitive advantage.[652]

309. NEI contends that, while nuclear resources may have been on notice that they could be subject to the MOPR, they expected the replacement rate to include the resource-specific FRR Alternative.[653] PSEG contends that its nuclear resources have operated competitively within the rules and made decisions under the assumption that they would be able to continue to compete in the market, consistent with the Commission's reasoning that the exemptions "are an extension or re-adoption of the status quo ante for many types of resources that accept the premise of a competitive capacity market" and have operated within the market rules as they have evolved and made decisions "based on affirmative guidance [] indicating that those decisions would not be disruptive to competitive markets."[654]

310. Exelon points out that existing self-supply resources make up nearly 31 GWs of PJM's installed capacity, while existing nuclear units receiving ZECs are five GWs.[655] The Illinois Commission asserts that existing nuclear units currently receiving state support in PJM are finite and not growing, like the existing renewable and self-supply resources that the December 2019 Order exempted. The Illinois Commission further asserts the December 2019 Order is unduly discriminatory between nuclear resources because it exempts existing nuclear units owned by, or contracted to, vertically integrated utilities under the Self-Supply Exemption,[656] but subjects existing nuclear plants owned

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[652] Exelon Rehearing and Clarification Request at 28 (citing December 2019 Order, 169 FERC 61,239 at P 203).

[653] NEI Rehearing Request at 12-13; *see also* Consumer Representatives Rehearing and Clarification Request at 17-19.

[654] PSEG Rehearing Request at 13-14 (stating that more than $200 million has been invested in the Hope Creek plant since 2008 and those investments were made with the expectation that owners would recoup them over future years) (citing December 2019 Order, 169 FERC ¶ 61,236 at P 14).

[655] Exelon Rehearing and Clarification Request at 29.

[656] Illinois Commission Rehearing Request at 11 (citing December 19 Order, 169 FERC ¶ 61,239 at n.427).

by independent or utility-affiliated entities to the expanded MOPR due to state restructuring statutes.[657]

311. Consumer Representatives argue that the December 2019 Order fails to justify the different treatment of existing resources generally given that some existing resources are exempted and others, like coal, natural gas, and petroleum, are not.[658] Consumer Representatives further argue that requiring new natural gas-fired resources to be subject to mitigation unduly discriminates against these resources, given that other non-subsidized resources are not subject to the MOPR's default offer price floors,[659] asserting that requiring a nexus between State Subsidies and all other resources, but no nexus between State Subsidies and new natural gas-fired resources, undermines the Commission's objective of ensuring a competitive fuel-neutral process designed to select the most economic resources.[660]

312. NEI contends that State-Subsidized Resources will be also unduly discriminated against in terms of their ability to compete with resources that are not subject to the MOPR in energy and ancillary services markets because they may have to offer higher in those markets in the absence of capacity revenues.[661]

313. NEI argues that the December 2019 Order is unduly discriminatory because it may prevent some resources, which serve the same resource adequacy function as other resources, from selling their resource adequacy attributes in the capacity market merely because they are State-Subsidized Resources.[662] Clean Energy Associations state that the

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[657] *Id*.

[658] Consumer Representatives Rehearing and Clarification Request at 24-26 (noting the different treatment is not fuel neutral).

[659] *Id*. at 19-21.

[660] *Id*. at 22-26.

[661] NEI Rehearing Request at 13, n 43. NEI argues that the courts have previously required the Commission to remedy similarly impacts. *Id.* (citing *Conway*, 510 F.2d at 1274; *Boroughs of Ellwood City v. FERC*, 731 F.2d 959, 978 (D.C. Cir. 1984) ("[W]hen the Commission finds that wholesale rates, compared with retail rates, demonstrate non-cost-justified price discrimination with a significant impact on the wholesale customer's ability to compete in the retail market, it must at least consider this price discrimination and its anticompetitive effect in setting a just and reasonable rate.")).

[662] NEI Rehearing Request at 13; *see also* Clean Energy Associations Rehearing and Clarification Request at 25-26; Clean Energy Advocates Rehearing Request at 34.

Commission's failure to acknowledge that the December 2019 Order will produce a class of uncompensated resources that are similarly situated to other resources providing resource adequacy violates the Commission's statutory mandate to ensure that rates and practices are not unduly discriminatory or preferential.[663]

314. The Ohio Commission also characterizes as unduly discriminatory the Commission's finding, on the one hand, that there is no reason to give a competitive advantage to new self-supply entities in vertically integrated states, but then providing an exemption for existing self-supply entities to the prejudice of retail choice states like Ohio.[664] Similarly, AEP/Duke argue the Commission's finding that the state-approved retail rider related to OVEC is a State Subsidy is a direct attack on a state-retail ratemaking decision (Ohio's decision to be a retail choice state and use a state-approved retail rider) that has no connection to or impact on whether OVEC continues to operate within PJM.[665]

315. IMEA argues that, like other PJM market participants, municipal utilities own generation resources, procure and sell electricity and capacity at wholesale, and ensure that their customers receive electricity. But, IMEA points out, on the basis that a municipal utility's budget and business model are a State Subsidy, municipal utilities are treated differently than other market participants, which, IMEA contends, is unduly discriminatory against municipal utilities, as there is no record evidence that municipal utilities transact any differently than other types of utilities or that municipal utilities single out "preferred generation resources" or pay subsidies to specific generation resource types.[666] IMEA argues that the State Subsidy definition encompasses all decisions that IMEA makes regarding generating resources, as well as bilateral contracts regardless of whether they are for capacity or energy or bundled with both, thereby including all of IMEA's commercial activity. According to IMEA, encompassing all commercial decisions by municipal utilities, and electric cooperatives, within the State Subsidy definition is discriminatory.[667] IMEA further alleges as unduly discriminatory the fact that other market participants are afforded opportunities to reject or forego State Subsidies when municipal utilities may not. IMEA states that this consigns municipal utilities to mitigation, without the ability to respond to price signals and that denying certain market participants the ability to fully engage in the market results in undue

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[663] Clean Energy Associations Rehearing and Clarification Request at 26.

[664] Ohio Commission Rehearing Request at 10, 16.

[665] AEP/Duke Rehearing Request at 7.

[666] IMEA Rehearing and Clarification Request at 11, 15.

[667] *Id*. at 13-14.

discrimination and produces and unjust and unreasonable rate.[668] Public Power Entities contend that not providing an exemption for self-supply resources going forward is unduly discriminatory, given that the Commission previously found there are differences between utilities in restructured states and traditionally regulated states with regard to uneconomic entry.[669]

316. Clean Energy Associations and Clean Energy Advocates argue that the December 2019 Order discriminates between resources who obtain revenue outside Commission-jurisdictional markets depending on whether that revenue derives directly from state policies or from private transactions, citing the sale of RECs and coal ash.[670] In both cases, Clean Energy Associations argue that the receipt of "out-of-market" revenue has the potential to suppress capacity market prices and both are outside the Commission's jurisdiction, but the December 2019 Order only subjects renewable resources selling RECs to the MOPR, while taking no action against resources that sell coal ash, even though both groups of resources have the ability to suppress capacity market prices through the sale of RECs and coal ash.[671]

317. Consumers Coalition argue that the replacement rate permits emitting resources to include state-imposed environmental costs in their offers, like emissions costs, but excludes state-derived revenue from affected resources' capacity offers, preventing these resources from reducing wholesale capacity costs, and there is no basis for this different treatment.[672]

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[668] *Id*. at 15-17.

[669] Public Power Entities Clarification and Rehearing Request at 29 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at P 111 (rejecting arguments that it is unduly discriminatory against restructured states to exempt self-supply entities)).

[670] Clean Energy Associations Rehearing and Clarification Request at 25; Clean Energy Advocates Rehearing Request at 56-57.

[671] Clean Energy Associations Rehearing and Clarification Request at 25-26; Clean Energy Advocates Rehearing Request at 54, 57; *see also* Ohio Commission Rehearing Request at 6, 13 (contending that all resources are similarly situated in their ability to offer capacity, but only some resources are mitigated based on the type of subsidy they receive); Consumers Coalition Rehearing Request at 6-7, 8-9 (arguing that the December 2019 Order unduly discriminates based on the type of revenue).

[672] Consumers Coalition Rehearing Request at 39-40.

### 2. **Commission Determination**

318. We deny rehearing requests that argue the December 2019 Order is unduly discriminatory or preferential because it exempts some resources, but not others. As the Commission has previously explained, the FPA forbids "undue" preferences, advantages, and prejudices.[673] Whether a rate or practice is unduly discriminatory depends on whether it provides different treatment to different classes of entities and turns on whether those classes of entities are similarly situated. "To say that entities are similarly situated does not mean that there are no differences between them; rather, it means that there are no differences that are material to the inquiry at hand."[674] Moreover, undue discrimination can occur when a seller charges the same rate to differently situated customers.[675]

319. Parties who argue that the replacement rate unduly discriminates against one group of existing subsidized resources, while exempting other existing resources, are flipping the facts and the Commission's rationale upside down. The June 2018 Order was a necessary reaction to new and expanding State Subsidies that were distorting the capacity market and were not addressed by the limited scope of the MOPR—in particular, its confinement to new natural gas-fired resources—which resulted in unduly preferential treatment for State-Subsidized Resources and unduly discriminated against non-State-Subsidized Resources. As in past MOPR-related orders, the Commission has tailored its response to mitigate the practices that cause the most harm.[676] The subsidies that certain states enacted to keep struggling resources online were a new and expanding phenomenon that undermined the foundational assumptions of the PJM capacity market. For example, ZEC legislation was passed in Illinois and New Jersey, and then

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[673] 16 U.S.C. §§ 824a(b), 824e(a).

[674] *Transmission Agency of N. Cal. v. FERC*, 628 F.3d 538, 549 (D.C. Cir. 2010); *Town of Norwood*, 202 F.3d at 402 ("But differential treatment does not necessarily amount to *undue* preference where the difference in treatment can be explained by some factor deemed acceptable to regulators (and the courts).") (emphasis in original); *Cities of Newark v. FERC*, 763 F.2d 533, 546 (3d Cir. 1985) ("differences in rates are justified where they are predicated upon factual differences between customers").

[675] *See Ala. Elec., Inc. v. FERC*, 684 F.2d 20, 27-28 (D.C. Cir. 1982) ("If the costs of providing service to one group are different from the costs of serving the other, the two groups are in one important respect quite dissimilar."); *Elec. Consumers Res. Council v. FERC*, 747 F.2d 1511, 1515-16 (D.C. Cir. 1984).

[676] 2011 MOPR Order, 135 FERC ¶ 61,022 (eliminating state mandate exemption, permitting wind and solar resources to make zero dollar offers, among other things); 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145, *aff'd sub nom. NJBPU*, 744 F.3d 74.

Pennsylvania considered ZEC legislation as well. The growing impact of state policies on organized capacity markets was so obvious as it developed that the Commissioners in 2017 presided over an extensive technical conference to explore solutions to this issue in PJM, NYISO and ISO-NE.[677] But that effort failed to produce decisive Commission action to address the issue in PJM, including any action on the original Calpine complaint, and the Commission's ability to respond was hampered by the absence of a quorum for some time. PJM ultimately stepped forward with its proposal under FPA section 205 in April 2018 and that proposal, which was subject to a statutory deadline, catalyzed a decisive Commission order. Even after the June 2018 Order, certain states pursued new or expanded out-of-market support for preferred resources.[678]

320. The new subsidies that states enacted to extend the commercial life of preferred generation resources in the face of competition with more cost-effective resources[679] (i.e., nuclear resources supported by ZECs, or coal-fired resources supported by more recent Ohio legislation) can distort the market in the absence of an explicit prohibition regarding existing resources in the MOPR, and highlight the clear tension between that new form of out-of-market support and the Commission's 2011 orders removing the state mandate exemption.[680] These circumstances are quite different from the perpetuation or expansion of various forms of state support for other types of resources that the Commission had expressly declined to address through capacity market rule changes—for example, the Commission's explicit statements regarding renewable resources and demand response,[681] as well as its authorization of a specific exemption for self-supply

[677] June 2018 Order, 163 FERC ¶ 61,236 at P 16 (describing technical conference convened in Docket No. AD17-11-000 to explore the impact of out-of-market support for specific resources or resource types in PJM, ISO New England, and NYISO).

[678] December 2019 Order, 169 FERC ¶ 61,239 at P 22 n.55.

[679] The Commission is cognizant of the manner in which other market rules outside the scope of this proceeding have disadvantaged the resources that the states sought to support, and thereby allowed other resources to appear more cost-effective than they may actually be in a more refined head-to-head economic comparison of reliability and resilience value. We are addressing those matters in other dockets.

[680] 2011 MOPR Order, 135 FERC ¶ 61,022, *reh'g denied*, 137 FERC ¶ 61,145, *aff'd sub nom*. NJBPU, 744 F.3d 74.

[681] *See, e.g.*, 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 166-167 (accepting PJM's proposal to apply the MOPR to only new natural gas-fired resources because they are the most likely resources to exercise buyer-side market power); 2011 MOPR Order, 135 FERC ¶ 61,022 at PP 152-153 (permitting wind and solar resources to make zero dollar offers); 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 111; *see also N.Y. Pub. Serv. Comm.*, 158 FERC ¶ 61,137 at P 30 (exempting demand response resources

resources—albeit short-lived and reversed on direct judicial review.[682] As we explained in the December 2019 Order, the exemptions "are an extension or re-adoption of the *status quo ante* for many types of resources that accept the premise of a competitive capacity market, have operated within the market rules as those rules have evolved over time, and made decisions based on affirmative guidance from the Commission indicating that those decisions would not be disruptive to competitive markets."[683] In short, the exemptions reflect an equitable judgement that the exempted resources, unlike the non-exempt resources, *entered* the market based on the Commission's prior statements.

321. The parties argue that the Commission's prior orders had also insulated nuclear and coal resources from mitigation under the preexisting MOPR and that the December 2019 Order's reasoning for exempting self-supply and renewable resources applies to other existing resources[684] But there are two problems with that argument. First, the Commission's prior statements concerning nuclear and coal-fired generation were made in the context of a MOPR that only applied to *new* resources, not existing resources. Moreover, the Commission limited mitigation to new gas-fired resources because that was the threat presented at the time, finding that the rule did not need to extend to new nuclear or coal-fired resources because those types of resources are too large and expensive, and take too long to build, to be effective tools for the exercise of buyer-side market power. Second, no new nuclear or coal-fired resources have been constructed in PJM since the Commission made those statements. The same cannot be said about demand response, renewable resources, or self-supply resources—all of which have seen new entry in reliance on the Commission's prior determinations. That difference is crucial and it is more than sufficient to find that pre-existing nuclear and coal plants receiving post-construction/operation subsidies like ZECs are not similarly situated to the

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from the New York market power mitigation rules), *order on reh'g*, 170 FERC ¶ 61,120 (2020) (granting rehearing, in part, to find that it is not unjust and unreasonable to apply the buyer-side market mitigation rules to demand response resources).

[682] *See NRG Power Mktg., LLC, v. FERC*, 862 F.3d 108 (D.C. Cir. 2017) (*NRG*), *order on remand*, 161 FERC ¶ 61,252 (2017), *reh'g denied*, 169 FERC ¶ 61,237 (2019).

[683] December 2019 Order, 169 FERC ¶ 61,239 at P 17.

[684] *See, e.g.*, FES Rehearing Request at 18-19 (asserting that nuclear resources have traditionally been exempt from review) (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 166-167); Exelon Rehearing and Clarification Request at 28-29 (arguing that not exempting existing nuclear resources causes "disruption to the industry" and threatens "existing investments") (citing December 2019 Order, 169 FERC ¶ 61,239 at P 203); PSEG Rehearing Request at 13 (asserting that it operated within the market rules and made investment decisions under assumption that they would be able to continue to compete in the market).

more recent entry of demand response, renewable, and self-supply resources for purposes of granting an exemption. Moreover, the Commission has developed a replacement rate intended to place all new resources on a level playing field with regard to out-of-market support going forward, with the exception a new gas-fired resources, which we have explained will remain subject to the existing MOPR because that rule was not the subject of these consolidated complaint proceedings and new gas-fired resources remain the best-positioned resources through which to exercise buyer-side market power.

322. We disagree with Consumer Representatives that new natural gas-fired resources are unduly discriminated against because they are mitigated regardless of whether they receive or are entitled to receive State Subsidies. As stated in the December 2019 Order, new natural gas-fired resources remain able to suppress capacity prices based on the exercise of buyer-side market power, not based on whether they receive State Subsidies, which justifies the different treatment of new natural gas-fired resources.[685] The Commission has also confronted attempts by states to subsidize new natural gas-fired resources, which were the impetus for the 2011 MOPR reforms that eliminated the state mandate exemption.[686] Moreover, the Calpine complaint did not argue, and the Commission did not find, that the existing MOPR for new natural gas-fired resources was unjust and unreasonable. Changes to that rule are beyond the scope of the replacement rate set in this proceeding, which confronts a new variety of threats to the integrity of the wholesale capacity market.

323. Parties state that the December 2019 Order treats State-Subsidized Resources differently than non-subsidized resources, resulting in State-Subsidized Resources having to offer higher in the energy and ancillary markets in the absence of capacity revenues, and unduly discriminates against State-Subsidized Resources by not recognizing or compensating these resources for their resource adequacy contributions. We disagree that the December 2019 Order results in undue discrimination. State-Subsidized Resources are not similarly situated to non-subsidized resources for purposes of offering at a competitive price in the capacity market. State-Subsidized Resources that are not able to clear the market absent the State Subsidy are not economic and represent excess capacity. Such resources are not similarly situated to resources retained for reliability.

[685] *Id*. P 42; *see also* June 2018 Order, 163 FERC ¶ 61,236 at P 155 (reiterating that new natural gas-fired resources are the most efficient resources to suppress capacity market prices, but no longer the only resources able to do so due to the advent of increased out-of-market support). As discussed below, the December 2019 Order did not move away from applying the MOPR to address buyer-side market power, rather, the December 2019 Order continues with prior precedent extending the MOPR to address the effects of State Subsidies in addition to buyer-side market power.

[686] 2011 MOPR Order, 135 FERC ¶ 61,022 at P 139, *reh'g denied*, 137 FERC ¶ 61,145, *aff'd sub nom*. NJBPU, 744 F.3d 74.

The replacement rate does not unduly discriminate against these resources; rather it ensures that State-Subsidized Resources do not distort market outcomes.

324. Parties assert that it is unduly discriminatory to provide an exemption for existing self-supply resources, but not new self-supply resources. We disagree. The December 2019 Order explains that existing self-supply was built under prior MOPR rules finding that self-supply resources are not disruptive to competitive markets,[687] thus recognizing that existing self-supply resources have already made investment decisions based on our prior affirmative finding that they should not be subject to the default offer price floors. The Ohio Commission avers that exempting existing self-supply resources unduly prejudices retail choice states. Yet, State-Subsidized Resources in retail choice states are treated similarly to those in regulated states—all State-Subsidized Resources are subject to the expanded MOPR. While some State-Subsidized Resources in retail choice states may not be exempt under the Self-Supply Exemption, they may nonetheless avoid the expanded MOPR through the Competitive or Unit-Specific Exemptions and are thus not treated differently.

325. We disagree with IMEA that the December 2019 Order discriminates against municipal utilities because they cannot elect the Competitive Exemption. Municipal utilities receive State Subsidies by definition and it would undermine the purpose of the expanded MOPR to exempt them. Parties argue that self-supply resources are unduly discriminated against because their very business model is a State Subsidy and that non-subsidized utilities also engage in long-term decision making and make resource planning decisions, but are not mitigated. Public Power Entities suggest that it is unduly discriminatory to impose the expanded MOPR on self-supply utilities since the Commission previously found differences between utilities in restructured and traditional states warranting different treatment. The December 2019 Order addresses these points, explaining that the Commission is not persuaded that new self-supply resources should face less risk than other types of businesses in choosing whether to build their own generation or rely on the capacity market to satisfy their energy and capacity needs.[688] Further, self-supply entities engaging in long-term contracts are not similarly situated to private entities engaging in purely private long-term bilateral contracts because self-supply entities rely on State Subsidies, rather than just competitive revenue. The receipt of State Subsidies and corresponding ability to offer below cost are what distinguish self-supply resources from other market participants. Thus, the Commission determined that new self-supply resources should not be given special treatment based on their business model.[689] Moreover, when self-supply entities, including municipals and cooperatives,

[687] December 2019 Order, 169 FERC ¶ 61,239 at P 203.

[688] *Id*. P 204.

[689] *Id*.

seek to have resources participate in the capacity market with the potential to receive capacity payments, they can influence the market price for capacity and therefore must abide by the same rules as other participating resources.

326. We disagree with the parties' arguments that the December 2019 Order unduly discriminates among the types of out-of-market revenue that triggers the MOPR, pointing to RECs, which are mitigated, and coal ash sales and general economic and siting subsidies, which are not. The December 2019 Order explains why some out-of-market revenue is different from other types, so as to justify applying the expanded MOPR to resources receiving them. Specifically, we explained that those out-of-market payments included in the definition of State Subsidy are those that "squarely impact the production of electricity or supply-side participation in PJM's capacity market by supporting the entry or continued operation of preferred generation resources that may not otherwise be able to succeed in a competitive wholesale capacity market."[690] The Commission further explained that "[t]his definition is not intended to cover every form of state financial assistance that might indirectly affect FERC-jurisdictional rates or transactions; nor is it intended to address other commercial externalities or opportunities that might affect the economics of a particular resource."[691] Consistent with this finding, general economic and economic siting subsidies are not mitigated because they do not squarely impact the production of electricity or supply-side participation in the capacity market, but are available to all business types.[692] And, to the extent coal ash sales are purely voluntary, such that they do not fall under the definition of State Subsidy, they are similarly situated to voluntary RECs, which are not mitigated under the replacement rate. Further, the sale of coal ash is a general commercial opportunity unrelated to load-serving entities' participation in the capacity market and is not mitigated under the replacement rate.

327. Consumers Coalition argue that the expanded MOPR permits emitting resources to include state-imposed environmental costs in their offers, like emissions costs, but excludes state-derived revenue from affected resources' capacity offers, preventing these resources from reducing wholesale capacity costs, and that there is no basis for this different treatment. However, this proceeding does not deal with environmental costs, but rather the price-distorting effect of resources receiving out-of-market State Subsidies.[693] Such environmental costs are outside the scope of this proceeding because

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[690] *Id*. P 68.

[691] *Id*.

[692] *Id*. P 83. As discussed above, we disagree that general economic and siting subsidies are the same as State Subsidies based on the tethered to/directed at language.

[693] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 37-38; June 2018 Order, 163 FERC ¶ 61,236 at PP 151-155 (discussing evidence of growing state subsidies).

they do not serve to retain or support the entry of uneconomic resources in the capacity market as State Subsidies have been shown to do.

## F. Prior Precedent

### 1. Rehearing and Clarification Requests

328. Parties argue that the Commission departs from past precedent without a reasoned explanation because the December 2019 Order creates a capacity market that is no longer residual in nature.[694] Consumers Coalition state that the PJM capacity market was established as a mechanism to procure capacity as a "last resort," after load-serving entities have had an opportunity to procure capacity on their own, which they then offer into the capacity auction as price-takers, and designed to produce the clearing price needed to elicit enough competitive supply to satisfy unmet need.[695] As it relates to self-supply entities, NRECA/EKPC argue subjecting new public power resources to the MOPR, unless exempted, abandons the residual nature of the capacity market[696] because self-supply resources used to meet a load-serving entity's capacity obligation must first clear the market in order for a load-serving entity to use them.[697] Moreover, NRECA/EKPC contend that subjecting self-supply to the MOPR forces PJM to violate its Tariff, which describes the capacity market as a mechanism for load-serving entities to meet obligations not satisfied by self-supply.[698]

329. PJM asserts that the Commission did not provide a reasoned explanation for departing from prior PJM MOPR precedent focusing the MOPR on those resources and developments that posed the most substantial risk of interfering with efficient price formation, while exempting offers that posed less concern, and respecting the

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[694] *See, e.g.*, Consumers Coalition Rehearing Request at 10-15; ODEC Rehearing Request at 8-9; NCEMC Clarification and Rehearing Request at 18-20.

[695] Consumers Coalition Rehearing Request at 8 (citing *PJM*, 115 FERC ¶ 61,079 at PP 71, 91; *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,331, at P 13 (2006); 2011 MOPR Order, 135 FERC ¶ 61,022 at P 4).

[696] NRECA/EKPC Clarification and Rehearing Request at 31 (citing *PJM*, 115 FERC ¶ 61,079 at PP 55, 71).

[697] NRECA/EKPC Clarification and Rehearing Request at 31-37; *see also* ODEC Rehearing Request at 6, 8, 10-11; Buckeye Clarification and Rehearing Request at 7; NCEMC Clarification and Rehearing Request at 19-20.

[698] NRECA/EKPC Clarification and Rehearing Request at 32 (citing PJM OATT, Attach. DD, § 1).

longstanding integrated utility resource planning models.[699] PJM further argues that the December 2019 Order departs from the accommodative approach in ISO New England through CASPR, which accommodated state sponsored resources in a second auction.[700]

330. Moreover, previous MOPR applications, parties contend, were based on identified instances of buyer-side market power, and mitigating resources without identified market power violates longstanding Commission policy.[701] Clean Energy Associations state that administrative intervention has focused on preventing the exercise of market power, consistent with court decisions that transactions in the absence of market power can be assumed reasonable.[702] Clean Energy Associations argue that the December 2019 Order also departs from precedent regarding what constitutes a just and reasonable rate in the context of market-based rates, stating that financial support from state action is not new, but has been a dominant form of support, through including capital costs in a utility's rate base, or through RPS and REC programs.[703] ELCON contends that market participants have been allowed to sell at rates below that which allows them to recover their capital costs since the beginning of allowing market-based rates, and there is nothing different in either the type or scale of state policy support in the PJM region now as compared to the

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[699] PJM Rehearing and Clarification Request at 7, 12 (citing 2013 MOPR Order, 143 FERC ¶ 61,090; 2011 MOPR Order, 135 FERC ¶ 61,022; *PJM*, 117 FERC ¶ 61,331); *see also* ELCON Rehearing Request at 9 (contending that administrative interventions are ill-suited to "correct" subsidies).

[700] PJM Rehearing and Clarification Request at 7-10 (citing June 2018 Order, 163 FERC ¶ 61,236 at PP 157-61; CASPR Order, 162 FERC ¶ 61,205).

[701] Clean Energy Associations Rehearing and Clarification Request at 19-20 (citing *PJM.*, 117 FERC ¶ 61,331 at P 104; 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 20, 53, 107; *PJM Interconnection, L.L.C.*, 153 FERC ¶ 61,066, at PP 32, 52 (2015); *ISO New England Inc.*, 158 FERC ¶ 61,138 at P 10); Public Power Entities Rehearing and Clarification Request at 43-47 (arguing the Commission erred in reframing the MOPR as a tool required to prevent price suppression); Exelon Rehearing and Clarification Request at 19; ELCON Rehearing Request at 3-4.

[702] Clean Energy Associations Rehearing and Clarification Request at 19 (citing *Tejas*, 908 F.2d at 1004).

[703] Clean Energy Associations Rehearing and Clarification Request at 20-21 (citing *Cal. ex rel. Lockyer v. FERC*, 383 F.3d 1008 (9th Cir. 2004) (evaluating the Commission's market-based rate tariff program and finding that, in the absence of market power, voluntary exchanges are reasonable).

past.[704] ELCON further insists that the Commission cannot rely on *NJBPU*[705] or *NRG*[706] to justify the replacement rate, as the state polices at issue in those cases dealt with subsidies to isolated generators, whereas the replacement rate affects most new generation.[707] Clean Energy Associations further contend that in *NRG* and *NJBPU* there were identified instances of monopsony power.[708]

331. Stating that prior PJM MOPR orders have focused on mitigating state policies that could rationally be aimed at exercising market power to depress prices, such as support for gas-fired generation, parties argue that the December 2019 Order fails to provide a reasoned explanation for its departure from the Commission's precedent finding that renewable resources have neither the incentive nor ability to suppress capacity market prices.[709] Clean Energy Associations assert that the Commission previously approved PJM mitigation measures excluding renewable resources from the MOPR, restricted application of NYISO's buyer-side mitigation measures to renewable resources, and specifically held that renewable resources have little ability to suppress market prices in ISO-NE or PJM.[710]

332. Consumers Coalition argue that the Commission's authority to promote competition does not extend to neutralizing advantages and disadvantages, noting that in Order No. 888, the Commission disclaimed the obligation to "create a level competitive

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[704] ELCON Rehearing Request at 8.

[705] *NJBPU*, 744 F.3d at 97 (observing that the MOPR "ensures that its sponsor cannot exercise market power").

[706] *NRG*, 862 F.3d 108.

[707] ELCON Rehearing Request at 6; *see also* Clean Energy Associations Rehearing and Clarification Request at 29.

[708] Clean Energy Associations Rehearing and Clarification Request at 29.

[709] New Jersey Board Rehearing and Clarification Request at 20-21 (citing 2011 MOPR Order, 135 FERC ¶ 61,022 at PP 152-153; 2011 MOPR Rehearing Order, 137 FERC ¶ 61,145 at P 111; 2013 MOPR Order, 143 FERC ¶ 61,090 at PP 166-167); Clean Energy Associations Rehearing and Clarification Request at 24-25 (same); *see N.Y. Pub. Serv. Comm'n*, 153 FERC ¶ 61,022 at PP 2, 47 (exempting certain renewable resources that have limited or no incentive to exercise buyer-side market power); *ISO New England Inc.*, 150 FERC ¶ 61,065, at P 26 (2015) (renewables are a poor choice if a "developer's primary purpose is to suppress capacity market prices").

[710] *Id*.

playing field among generators," instead noting that power generation technologies have different costs and sellers come with a variety of advantages and disadvantages.[711] ODEC argues the December 2019 Order is a departure from Commission precedent encouraging the development and participation of a diversity of resource types in the wholesale markets, asserting that the December 2019 Order will make it more difficult to invest in emerging technologies.[712]

333. Exelon argues that the December 2019 Order is contrary to the Commission's reasoning for rejecting a complaint that California Independent System Operator Corporation's (CAISO) resource adequacy program resulted in insufficient revenues for efficient generators due to the influx of state-subsidized renewable generation.[713] In *La Paloma*, Exelon states that the Commission refused to find the existing resource adequacy construct unjust and unreasonable based on economic theory or speculation regarding the long-term effects on investor confidence, instead demanding concrete evidence of a shortfall in resource adequacy and finding that the complainants had made only broad and general claims about revenue insufficiency.[714] Exelon concludes that the record here is not appreciably different in that complainants made generalized assertions of revenue insufficiency, belied by evidence of continuing new entry and oversupply in the capacity market.[715]

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[711] Consumers Coalition Rehearing Request at 21-22 (citing Order No. 888, FERC Stats. & Regs. ¶ 31,036, *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048, *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248, *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046, *aff'd in relevant part sub nom. Transmission Access Policy Study Grp. v. FERC*, 225 F.3d 667, *aff'd sub nom. New York v. FERC*, 535 U.S. 1).

[712] ODEC Rehearing Request at 9-10 (citing *e.g.*, *Elec. Storage Participation in Mkts. Operated by Reg'l Transmission Organs. & Indep. Sys. Operators*, Order No. 841, 162 FERC ¶ 61,127 (2018), *order on reh'g and clarification*, Order No. 841-A, 167 FERC ¶ 61,154 (2019)).

[713] Exelon Rehearing and Clarification Request at 19-20 (citing *CXA La Paloma, LLC v. Cal. Indep. Sys. Operator Corp.*, 165 FERC ¶ 61,148 (2018), *order on reh'g*, 169 FERC ¶ 61,045, at P 8 (2019) (*La Paloma*)).

[714] Exelon Rehearing and Clarification Request at 20 (noting that the Commission stated that "low capacity prices are not necessarily indicative of an unjust and unreasonable construct" and that the California market continued to exhibit significant capacity oversupply) (citing *La Paloma*, 169 FERC ¶ 61,045 at P 9)).

[715] Exelon Rehearing and Clarification Request at 21.

334. Consumers Coalition argue that it is inefficient to ignore resources' resource-adequacy contributions if resources fail to clear the capacity auction and that the Commission has previously determined that RTOs should accept price taker capacity offers from resources retained for reliability or fuel security reasons through out-of-market payments, stating that low or zero dollar capacity offers accurately reflect the resource's low going-forward costs and are consistent with competitive market outcomes. Consumers Coalition argue that the December 2019 Order provides no basis for departing from these findings.[716]

### 2. Commission Determination

335. We disagree that the replacement rate changes the residual nature of the PJM capacity market. The December 2019 Order does not change how load-serving entities meet unmet capacity obligations; rather, the replacement rate only affects the price at which resources may offer into the capacity market to ensure that the price paid by all capacity market participants for unmet capacity needs is just and reasonable. The December 2019 Order, as discussed further below, is no different from prior PJM MOPR orders, in that it is focused on ensuring that resources are not able to distort capacity market prices.[717]

336. Load-serving entities may still supply capacity needs through a combination of owned or contracted generation, demand response resources, energy efficiency, and bilateral contracts. The December 2019 Order only finds that if a capacity resource is a State-Subsidized Resource, the resource must offer competitively. Likewise, if a self-supply entity wishes to use a new resource to meet its capacity obligations through the capacity market, the self-supply entity must offer that resource at a competitive price, which could include using the Unit-Specific Exemption. While mitigated resources can no longer offer below the default offer price floors without an exemption, and thus may not clear the capacity auction under the expanded MOPR, this only means that the self-supply entity will have to use a competitive resource to meet unmet load obligations. Moreover, subjecting State-Subsidized Resources to the expanded MOPR with the option for unit-specific review appropriately balances the need to protect the capacity market

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[716] Consumers Coalition Rehearing Request at 45-47 (citing *ISO New England Inc.*, 165 FERC ¶ 61,202, at P 88 (2018); *N.Y. Indep. Sys. Operator, Inc.*, 155 FERC ¶ 61,076, PP 79, 82-83 (2016); *Indep. Power Producers of N.Y. v. N.Y. Indep. Sys. Operator, Inc.*, 150 FERC ¶ 61,214, at PP 1, 2, 66, 68 (2015)).

[717] *See PJM.*, 117 FERC ¶ 61,331 at P 34 (stating that the MOPR would apply to sellers who may have incentives to depress market clearing prices below competitive levels); 2011 MOPR Order, 135 FERC ¶ 61,022 at P 141 (subjecting state-supported new natural gas-fired resources to the MOPR because uneconomic entry can produce unjust and unreasonable rates by artificially suppressing capacity prices).

from uneconomic entry or retention with the concern that some self-supply resources may not be used for capacity obligations because they did not clear.

337. We also disagree that the December 2019 Order is a departure from prior precedent that focused application of the MOPR on resources that posed the most substantial risk of interfering with efficient price formation while exempting those that did not. The replacement rate directed in the December 2019 Order addresses State-Subsidized Resources, which pose a risk to the integrity of competition in the wholesale capacity market and create unreasonable price distortions and cost shifts, while exempting resources that either justify lower offers through the Unit-Specific Exemption or certify that they will forego any State Subsidy, through the Competitive Exemption. These two exemptions, in addition to exempting certain existing resources based on the Commission's prior guidance, confine the replacement rate going forward to those resources that have the ability to suppress capacity market prices.[718] This is consistent with MOPR precedent, which has applied to the MOPR to address price suppression.[719] Moreover, the Commission's acceptance of ISO New England's CASPR proposal to accommodate state-sponsored resources is distinguishable. In *CASPR*, the Commission accepted a section 205 filing as a just and reasonable means to both (1) ensure a competitive capacity market that appropriately incentivizes entry and exit decisions; and (2) provide an accommodation mechanism for state-supported resources that does not inhibit the competitive capacity market.[720] As discussed below, the Commission determined that the accommodation method developed in the record in this proceeding, the resource-specific FRR Alternative, is not just and reasonable because it results in the same price suppression as the status quo.[721]

338. Because a purpose of the MOPR is to address price suppression, and the expanded MOPR specifically addresses price suppression as a result of State Subsidies, we disagree that the Commission is required to show the exercise of buyer-side market power prior to applying the MOPR. The MOPR has previously been used to address buyer-side market power, and the December 2019 Order left in place the existing MOPR, which serves that function.[722] The December 2019 Order explains why it is necessary to expand the MOPR

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[718] December 2019 Order, 169 FERC ¶ 61,239 at PP 7-8, 12-16, 37-38.

[719] *See PJM*, 117 FERC ¶ 61,331 at P 34 (stating that the MOPR applies to sellers that "may have the incentive to depress market clearing prices below competitive levels").

[720] *See* CASPR Order, 162 FERC ¶ 61,205 at PP 20, 25.

[721] *See supra* Section IV.G.

[722] December 2019 Order, 169 FERC ¶ 61,239 at P 42.

to apply to State Subsidies, because, in addition to market power concerns, out-of-market support poses price suppression risks. In other words, the December 2019 Order expands the scope of the MOPR, but not its underlying purpose.[723] Further, cases finding that a transaction is just and reasonable in the absence of market power[724] do not dictate that rates in every context are just and reasonable where there is no market power. *Tejas* and *Lockyer* merely stand for the premise that in the absence of market power, voluntary exchanges between entities and market-based rates may be deemed just and reasonable, not that the lack of market power demands a just and reasonable finding in the context of capacity market offers.

339. Clean Energy Associations and ELCON aver that state support for resources in some form has long been included in utilities' capital costs and that market participants have been allowed to sell at rates below that which allow them to recover their capital costs. We agree that state support is not new, but disagree that the December 2019 Order is not justified by relying on increased out-of-market support to expand the MOPR.[725] As pointed out in the June 2018 Order, the MOPR has had to change in light of changing circumstances.[726] Further, the court's decision in *NJBPU* supports the December 2019 Order because there, as here, the Commission's decision to eliminate the state mandate exemption was based on the "mounting evidence of risk" that out-of-market support could permit uneconomic entry. *NJBPU* affirmed the Commission's decision to subject state-supported new natural gas-fired resources to the MOPR because out-of-market support permits below-cost entry suppresses capacity prices.[727] Further, while the December 2019 Order replacement rate includes more resources than PJM's prior MOPR

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[723] *Id*. P 39; *see also* June 2018 Order, 163 FERC ¶ 61,236 at P 155 (finding that there is no substantive difference between price suppression triggered by the exercise of buyer-side market power and that triggered by out-of-market support); December 2019 Order, 169 FERC ¶ 61,239 at P 161 (distinguishing between the mitigating resources as a result of buyer-side market power and State Subsidies).

[724] *See* Clean Energy Associations Rehearing and Clarification Request at 19 (citing *Tejas*, 908 F.2d at 1004; *Lockyer*, 383 F.3d at 1013).

[725] December 2019 Order, 169 FERC ¶ 61,239 at PP 37-38.

[726] June 2018 Order, 163 FERC ¶ 61,236 at P 150 n.276.

[727] *NJBPU*, 744 F. 3d at 100. *NRG* likewise does not undermine the December 2019 Order because the underlying factual context supporting PJM's proposed changes in that case related to price suppression stemming from out-of-market support generally. *NRG*, 862 F.3d at 112-13.

limited to new gas-fired resources at issue in *NJBPU* or *NRG*, that is a reflection of the increased scope of the problem here.[728]

340. Nor is the December 2019 Order an unexplained departure from, or contrary to, prior precedent finding that renewable resources have little ability to suppress capacity market prices.[729] Prior MOPR orders exempting renewable resources found that renewable resources are not the most efficient resources to suppress capacity market prices,[730] not that they were unable to suppress capacity prices. Based on the record in this proceeding, circumstances have changed, warranting expanding the MOPR to renewable resources. Increasing State Subsidies permit renewable resources to offer non-competitively. That renewable resources have low capacity thresholds is not dispositive, because, on aggregate, renewable resources have the same ability as a larger generator to influence the clearing price. As the Commission stated in the June 2018 Order, price suppression stemming from State Subsidies is indistinguishable from price suppression triggered through the potential exercise of buyer-side market power and should therefore be addressed similarly.[731]

341. ODEC argues that the December 2019 Order will make it more difficult for a diverse mix of resources to participate in the capacity market, which ODEC contends is inconsistent with the Commission's rules encouraging the participation of electric storage in the PJM markets.[732] ODEC's concern that the replacement rate will discourage participation in the capacity market is speculative. A diversity of resources may still compete in the capacity market and states may well continue to invest in them. The

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[728] *See* December 2019 Order, 169 FERC ¶ 61,239 at PP 37-38. June 2018 Order, 163 FERC ¶ 61,236 at PP 151-155 (discussing evidence of growing state subsidies).

[729] *See* 2011 MOPR Order, 135 FERC ¶ 61,022 at P 153 ("wind and solar resources are a poor choice if a developer's primary purpose is to suppress capacity market prices"); 2013 MOPR Order, 137 FERC ¶ 61,090 at P 166 (the "MOPR may be focused on those resources that are most likely to raise price suppression concerns"); *N.Y. Pub. Serv. Comm'n*, 153 FERC ¶ 61,022 at PP 2, 47 (exempting renewable resources from MOPR that have "limited or no incentive and ability to exercise buyer-side market power")); *ISO New England Inc.*, 150 FERC ¶ 61,065 at P 26 ("renewable resources are not similarly situated to other types of resources in that they are unlikely to be used for price suppression" because they can qualify only a fraction of their nameplate capacity).

[730] *See* 2013 MOPR Order, 143 FERC ¶ 61,090 at P 166; 2011 MOPR Order, 135 FERC ¶ 61,022 at P 153.

[731] June 2018 Order, 163 FERC ¶ 61,236 at P 155.

[732] ODEC Rehearing Request at 9-10.

December 2019 Order merely establishes rules prioritizing competitive offers so that the wholesale capacity market produces just and reasonable wholesale capacity rates for every type of resource and utility in the multi-state PJM region. Nor, as Consumers Coalition allege, does the December 2019 Order depart from the reasoning in Order No. 888 where the Commission rejected arguments to "create a level competitive playing field among generators," noting that "all power generation technologies have different costs."[733] In fact, these statements were made in a different context—declining to impose environmental mitigation conditions on resources—and the Commission concluded that it did not have the power to equalize the environmental costs of electric production to ensure economic fairness. Here, in contrast, the Commission is regulating wholesale power market rules, and determined that, in order to produce just and reasonable rates, resources offering into the capacity market must do so from an even playing field. Moreover, read as a whole, Order No. 888 promotes the Commission's general policy of ensuring that all resources are able to compete in wholesale markets on a level playing field.

342. Exelon contends that the December 2019 Order is contrary to the Commission's reasoning in *La Paloma* where the Commission rejected a complaint that CAISO's resource adequacy program provided insufficient revenues for generators due to subsidized resources.[734] This is an out-of-time rehearing argument of the June 2018 Order. The Commission's decision in *La Paloma* found that complainants failed to meet their initial burden under FPA section 206 to demonstrate that the CAISO tariff or resource adequacy construct was unjust and unreasonable.[735] *La Paloma* thus deals with issues relevant to the June 2018 Order finding the PJM Tariff unjust and unreasonable and not the December 2019 Order, at issue here, regarding the just and reasonable replacement rate. Generally, though, we disagree that *La Paloma* contradicts findings in this proceeding because the Commission found in *La Paloma* that the complainant did not provide record evidence to support its allegations.[736] Here, the Commission's finding that PJM's pre-existing Tariff was unjust and unreasonable is based on record evidence that out-of-market support is increasing, combined with economic theory that out-of-market support suppresses capacity market clearing prices, unlike the resource adequacy construct in California, which is not a centralized market.

343. We acknowledge that the Commission has held that a competitive offer could be low for an existing resource and permitted price-taker offers from resources retained for

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[733] Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,687.

[734] *See La Paloma*, 165 FERC ¶ 61,148 at P 69.

[735] *Id*.

[736] *Id*. P 43; *La Paloma*, 165 FERC ¶ 61,148 at PP 170-172.

reliability. We disagree, however, that the December 2019 Order is an unexplained departure from this precedent. First, the replacement rate is not intended to address reliability from only from those resources deemed necessary for fuel-security, but rather is a mechanism to ensure resource adequacy from a variety of resources at just and reasonable rates. As such, the December 2019 Order directs PJM to implement rules to ensure that State-Subsidized Resources do not distort capacity market outcomes. Whether certain resources are needed for specific reliability reasons and rules facilitating this need are not at issue in this proceeding. Second, the December 2019 Order does not find that resources will not be able to offer low or close to zero where those prices are competitive. It is possible that a competitive offer could be low or zero. The resource specific default offer price floors have not yet been determined by PJM. The replacement rate also permits resources to offer below the default offer price floors through the Competitive Exemption for State Subsidized Resources or the Unit-Specific Exemption.

## G. Resource-Specific FRR Alternative

### 1. Proposed Resource-specific FRR Alternative

#### a. Rehearing and Clarification Requests

344. Parties argue that the Commission's one sentence rationale rejecting the resource-specific FRR Alternative—that the expanded MOPR without an accommodation mechanism is superior to the proposed resource-specific FRR Alternative and PJM's proposed resource carve-out (RCO)—is arbitrary and capricious.[737] The Maryland Commission contends that, in not adopting the resource-specific FRR Alternative, the Commission rejected the forward capacity market concept by effectively inviting states to exit the capacity market.[738]

345. Parties further argue that the June 2018 Order explained that the resource-specific FRR Alternative was a necessary component of a just and reasonable rate, and that the December 2019 Order conflicts with this finding.[739] FES argues the December 2019

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[737] Clean Energy Associations Rehearing and Clarification Request at 36; PSEG Rehearing Request at 12; Consumer Representatives Rehearing and Clarification Request at 14-16 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 6).

[738] Maryland Commission Rehearing and Clarification Request at 13.

[739] Clean Energy Associations Rehearing and Clarification Request at 38; DC Attorney General Rehearing Request at 24-25 & nn.83-85; NEI Rehearing Request at 3-4 (citing *Hatch v. FERC*, 654 F.2d 825, 834-35 (D.C. Cir. 1981)); Maryland Commission Rehearing and Clarification Request at 14; Illinois Commission Rehearing Request at 22;

Order's reversal of the proposed resource-specific FRR Alternative is arbitrary and capricious because the Commission has not provided any evidence of changed circumstances, nor did the June 2018 Order suggest that the Commission would pursue an expanded MOPR without an accommodation mechanism.[740]

346. Parties argue that that the December 2019 Order erred by rejecting the resource-specific FRR Alternative, or RCO,[741] because not accommodating states and forcing ratepayers to ignore capacity from certain resources and pay twice for capacity is unjust, unreasonable and unduly discriminatory.[742] Further, parties contend that a market design without a resource-specific FRR Alternative results in an inefficient market with distorted energy and capacity market prices, and leads to capacity over-procurement.[743] FES argues, for example, that the rejection of the resource-specific FRR Alternative undermines the Commission's stated objective, to protect the integrity of the wholesale markets, because it will result in PJM procuring unneeded capacity, artificially inflating capacity prices, which will attract excess capacity and further distort prices, and suppressing prices in the energy and ancillary services markets.[744]

347. The New Jersey Board asserts that the Commission has provided accommodation in other regions and that an accommodation mechanism is required to honor the fundamental right of states to incent the development of new carbon-free resources before

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PJM Rehearing and Clarification Request at 7-10 (citing June 2018 Order, 163 FERC ¶ 61,236 at PP 157-61); PSEG Rehearing Request at 12.

[740] FES Rehearing Request at 2-3, 11-13.

[741] Public Power Entities Rehearing and Clarification Request at 47-49; Clean Energy Associations Rehearing and Clarification Request at 36; DC Attorney General Rehearing Request at 24 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 219); NEI Rehearing Request at 3; Illinois Commission Rehearing Request at 22-23; Consumer Representatives Rehearing and Clarification Request at 14-16; SMECO Rehearing Request at 4; OSPI Rehearing Request at 3.

[742] Maryland Commission Rehearing and Clarification Request at 7, 14, 19; *see also* Ohio Commission Rehearing Request at 25; Illinois Commission Rehearing Request at 22.

[743] PSEG Rehearing Request at 11 (contending that an efficient market would place value on the delivered energy product and minimize the "missing money" supplied by the capacity market).

[744] FES Rehearing Request at 2-3, 10-12.

funding new resources that are incapable of providing these benefits.[745] The New Jersey Board adds that the ability to prefer one generation technology over another is a critical expression of the states' jurisdiction over generation resources and cooperative federalism.[746] FES contends that the Commission's decision to abandon accommodation mechanisms "pulls the rug out" from under legitimate state policy programs without explanation and creates uncertainty in the market.[747]

### b. Commission Determination

348. We disagree with parties that the Commission erred in rejecting the resource-specific FRR Alternative. As stated in the December 2019 Order, we find an expanded MOPR without a resource-specific FRR Alternative is just and reasonable. We further continue to find, based on the record, that the proposed resource-specific FRR Alternative could undermine the MOPR's purpose by failing to correct the impact of State-Subsidized Resources on the capacity market. As PJM notes in its initial testimony, "removing subsidized resources and an equivalent amount of load from a capacity auction would likely result in a suppressed clearing price similar to that which would result in retaining the subsidized resource and load."[748] While paper hearing parties contend that this suppressed price can still be competitive and just and reasonable because all participating resources would be offering competitively, we disagree. Based on the record in the paper hearing proceeding, we find that the resulting lower price is not just and reasonable, because it would not ensure the capacity market is able to fulfill its primary purpose—securing future capacity to ensure resource adequacy and reliability in the PJM footprint at just and reasonable rates.[749]

349. In addition, we find that the bifurcated capacity market would fail to incent long-term investment. At a fundamental level, the resource-specific FRR Alternative would allow subsidized, uneconomic resources to displace competitive, economic ones, just as

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[745] New Jersey Board Rehearing and Clarification Request at 28; *see also* DC Attorney General Rehearing Request at 24-25 (stating that the Commission does not discuss why it is just and reasonable not to accommodate state policy decisions and to potentially force renewable resources offline).

[746] New Jersey Board Rehearing and Clarification Request at 28-31 (citing CASPR Order, 162 FERC ¶ 61,205; *N.Y. Indep. Sys. Operator*, 150 FERC ¶ 61,208, at PP 6, 46-48 (2015)).

[747] FES Rehearing Request at 12-14 (quoting *NJBPU*, 744 F.3d at 102).

[748] PJM Initial Testimony at 5 n 9 (filed Oct. 2, 2018).

[749] *See* PJM OATT, Attach. DD, § 1 (Introduction).

under the Tariff rules found unjust and unreasonable in the June 2018 Order, albeit via a different mechanism. Thus, the resource-specific FRR Alternative could prevent non-subsidized resources from clearing the capacity auctions, including resources that would have cleared absent the State-Subsidized Resources electing to use the resource-specific FRR Alternative. Further, potential investors may not be able to predict when pockets of load may be pulled into the resource-specific FRR Alternative construct to accommodate a subsidized resource and further reduce the size of the capacity market. These factors would likely have a chilling effect on private investment, which could lead to resource adequacy concerns. For these reasons, we affirm the December 2019 Order's finding that a resource-specific FRR Alternative would have unacceptable market distorting impacts that would inhibit incentives for competing investment in the PJM market over the long-term.[750]

350. We do not agree with parties that a resource-specific FRR Alternative, or any other accommodation scheme, is a necessary corollary to an expanded MOPR because it would avoid or mitigate consumers double paying for capacity, load-serving entities from over-procuring capacity, or accommodate state policy choices. We do not take these concerns lightly. However, the courts have not required accommodation as part of a just and reasonable rate.[751] Especially where, as here, we have determined that the accommodation mechanism developed in the record in this proceeding could result in price suppression and impair resource adequacy similarly to the PJM Tariff provisions found unjust and unreasonable in the June 2018 Order, we decline to pursue this option.[752]

351. With regard to arguments that the expanded MOPR without the resource-specific FRR Alternative would harm the markets or otherwise have negative impacts, we address those above, in Section IV.B.7. While we have found that alternative capacity market constructs are just and reasonable in other regions,[753] we are not required to implement

[750] December 2019 Order, 169 FERC ¶ 61,239 at P 6.

[751] *See, e.g.*, *NJPBU*, 744 F.3d at 97 (stating that states are free to make their own decisions on how to meet capacity needs, but must bear the costs of those decisions) (citing *Connecticut PUC*, 569 F.3d at 481; *NEGPA*, 757 F.3d at 295).

[752] *Id.*; *see also Coal. for Competitive Elec.*, 272 F. Supp. 3d at 576 (finding that when the Commission exercises authority over state concerns, accommodation is necessary unless "clear damage to federal goals would result"); *S.C. Pub. Serv. Auth.*, 762 F.3d at64 (upholding Commission's authority to establish rules that may implicate matters within state jurisdiction).

[753] *See* New Jersey Board Rehearing and Clarification Request at 29-30).

the same rules here.[754] The expanded MOPR approach detailed in this order is a just and reasonable means to solve the problems identified in Calpine's complaint and address harm to PJM's capacity market caused by out-of-market state support to keep existing uneconomic resources in operation and to support the uneconomic entry of new resources. The Commission accepted ISO New England's CASPR proposal as just and reasonable under FPA section 205, unlike here where accommodation has not been shown to be just and reasonable.

352. Further, contrary to parties' suggestion, the June 2018 Order did not find that the resource-specific FRR Alternative would be necessary for the expanded MOPR to be just and reasonable. Rather, the June 2018 Order preliminarily proposed, as part of a *potential* just and reasonable replacement rate, a resource-specific FRR Alternative option and then sought comment on implementation, as well as how an accommodation might impact capacity prices.[755] Having reviewed the testimony provided in the paper hearing, the Commission determined that adopting a resource-specific FRR Alternative in this instance would vitiate the expanded MOPR. Given that the resource-specific FRR Alternative was a proposed course of action, the Commission thus did not depart from precedent or inappropriately engender a reliance interest.[756]

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[754] *N.Y. Pub. Serv. Comm'n*, 153 FERC ¶ 61,022 at P 38. Specifically, with regard to the NYISO capacity market rules, the Commission has repeatedly noted the differences between the PJM and NYISO markets making different rules appropriate. *Id.*; *see also N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121, at P 16 n.39 (2020). Regional markets are also not required to have the same rules. December 2019 Order, 169 FERC ¶ 61,239 at P 204 n.431.

[755] June 2018 Order, 163 FERC ¶ 61,236 at PP 157, 160, 164-170.

[756] Indeed, section 206 of the FPA states that when the Commission finds a Tariff unjust and unreasonable, the Commission shall determine the just and reasonable replacement and "shall fix the same by order," which the Commission did not do until the December 2019 Order. 16 U.S.C. § 824e(a). Parties thus had no right to rely on a proposed framework that was not a final solution. *Cf. Am. Fed'n Of Labor and Congress of Indus. Org.*, 757 F.2d 330, 338 (D.C. Cir. 1985) ("It is, of course, elementary that a final rule need not be identical to the original proposed rule."); *Am. Coke and Coal Chemicals Inst. v. Envtl. Protection Agency*, 452 F.3d 930, 938-39 (D.C. Cir. 2006) (affirming changes to final rule that were a "logical outgrowth" of the proposed rule).

### 2. Existing FRR Alternative

#### a. Rehearing and Clarification Requests

353. EPSA/P3 request clarification that the December 2019 Order does not make a finding with regard to the justness and reasonableness of the existing FRR Alternative. EPSA/P3 explain that the existing FRR Alternative rules were not at issue in the underlying complaint or the paper hearing and are not found in the Tariff, and argues that the Commission could not, therefore, make a substantive determination on their merits.[757] EPSA/P3 state that the existing FRR construct has been little-used and that, to the extent more parties elect that option as a result of the December 2019 Order, changes to the construct may prove necessary.[758]

354. Parties disagree with the December 2019 Order's statement that if self-supply utilities wish to craft their own resource adequacy plans or not be subject to the expanded MOPR, they may do so through the existing FRR Alternative.[759] Parties argue that the existing FRR alternative is not a viable solution for states required to fundamentally alter an existing framework,[760] nor a suitable option for public power self-supply entities.[761] Public Power Entities state that the Commission's suggestion that the existing FRR Alternative accommodates public power self-supply resources is factually incorrect, arbitrary and capricious, and without evidentiary support.[762] Public Power Entities argue that because the existing FRR Alternative requires utilities to meet capacity obligations entirely outside the capacity market, it is ill suited for public power utilities who have limited capacity resource options and whose unforced capacity obligations fluctuate over

[757] EPSA/P3 Rehearing and Clarification Request at 18.

[758] *Id*. at 18; *see also* Calpine Clarification and Rehearing Request at 10.

[759] December 2019 Order, 169 FERC ¶ 61,239 at PP 12, 202, 204.

[760] New Jersey Board Rehearing and Clarification Request at 32; Clean Energy Advocates Rehearing Request at 77 (arguing that the Commission must ensure that the rules governing the existing FRR Alternative do not arbitrarily limit its use and that eligible entities that had never previously contemplated use of the existing FRR have adequate time to obtain needed clarification or authority from regulators).

[761] Public Power Entities Rehearing and Clarification Request at 34-39; EKPC Rehearing and Clarification Request at 10; ODEC Rehearing Request at 10 (noting "onerous" FRR requirements).

[762] Public Power Entities Rehearing and Clarification Request at 9.

time.[763] In constrained LDAs, Public Power Entities further state that opting for the existing FRR Alternative is a risk given the five year commitment and potential addition of new LDAs or changing LDA boundaries with differing internal minimum resource requirements, as this may result in a greater capacity obligations than existed at the time of the five year FRR plan and subsequent penalties for not meeting resource adequacy commitments.[764]

355. Additionally, Clean Energy Advocates contend that, in 2013, the Commission rejected arguments that the availability of the existing FRR Alternative obviated the need for a self-supply exemption, but that the Commission has not explained why it now believes it is just and reasonable to point to the FRR Alternative as a way for affected customers to avoid the Commission's replacement rate.[765] Clean Energy Advocates argue that the Commission erred when it determined that self-supply entities may avoid the MOPR by using the existing FRR alternative because single customer entities are not currently eligible to use an FRR plan, which leaves single customer entities unduly discriminated against relative to other entities the December 2019 Order identifies as identically situated.[766]

356. Parties argue that use of the existing FRR Alternative will result in undesirable consequences and undermine the capacity market.[767] The Maryland Commission notes that the December 2019 Order deems the existing FRR Alternative similar to the rejected resource-specific FRR Alternative, but does not explain why the existing FRR is okay or can be used alongside the replacement rate in a just and reasonable manner.[768] For example, the Maryland Commission posits that if the replacement rate were implemented in constrained zones, certain resources could exercise market power by preventing investor-owned utilities from pursuing the FRR Alternative option.[769] EKPC suggests

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[763] *Id*. at 35-36.

[764] *Id*. at 36-37 (also opining that the "lumpy nature" of investments in generation means that capacity in the early life of a resource in excess of what is needed will become stranded under the existing FRR Alternative).

[765] Clean Energy Advocates Rehearing Request at 77-78 (citing 2013 MOPR Order, 143 FERC ¶ 61,090 at P 110).

[766] Clean Energy Advocates Rehearing Request at 53-54.

[767] *See, e.g.*, Pennsylvania Commission Rehearing and Clarification Request at 8.

[768] Maryland Commission Rehearing and Clarification Request at 14-15.

[769] *Id*. at 15.

that if a sufficient number of utilities opt for the existing FRR Alternative, it could lead to the balkanization of the PJM region, leading to a diminished wholesale capacity market and diminished consumer benefits in the PJM region.[770] Because the FRR Alternative removes load and supply from the market, PJM contends that it does not provide transparent price signals to market participants, and if significant additional load were to utilize the FRR Alternative, some efficiencies of the capacity market may be lost.[771] ODEC argues that PJM submitted a report by the Brattle Group which suggested that if self-supply is not exempt from the MOPR, and instead elects the FRR Alternative, it will create market inefficiencies which undermine the capacity market.[772]

357. The Ohio Commission argues that the existing FRR works against the notion that the replacement rate will make the market more just and reasonable and cites a December 2019 report from the Market Monitor estimating that the rest of RTO clearing price would drop $61.77 per MW-day compared to the reference-case actual BRA result if Illinois elected the FRR Alternative, but that the price in some Ohio zones would remain unchanged.[773]

358. Parties further argue that the existing FRR Alternative presents challenges to retail competition.[774] SMECO contends that the existing FRR Alternative is unwieldy and unworkable for load-serving entities planning new capacity because the FRR requires a load-serving entity to carve out its entire load, including load for retail choice states.[775] Consumer Representatives ask that the Commission clarify that the replacement rate includes any necessary changes to the existing FRR Alternative to ensure that the exercise of this option does not undermine state decisions to allow retail competition or

[770] EKPC Rehearing and Clarification Request at 10.

[771] PJM Rehearing and Clarification Request at 5.

[772] ODEC Rehearing Request at 14 (citing PJM Interconnection, L.L.C., Docket No. ER12-513-000, Att. E (2011 RPM Performance Assessment) (filed Dec. 1, 2011)).

[773] Ohio Commission Rehearing Request at 10-11, n. 11 (citing Market Monitor, *Potential Impacts of the Creation of a ComEd FRR* (December 18, 2019)).

[774] Maryland Commission Rehearing and Clarification Request at 16; Consumer Representatives Rehearing and Clarification Request at 44-45.

[775] SMECO Rehearing Request at 7.

otherwise undermine the ability of retail customers to shop for electricity where permitted.[776]

359. Buckeye states that if it elects the FRR Alternative, it faces the risk of its generation not matching its load in specific LDAs, which could cause serious economic problems.[777] Buckeye seeks clarification or rehearing to permit load-serving entities to be assigned their own LDA under the FRR Alternative regardless of whether they own a transmission system or are otherwise assigned an LDA for transmission purposes. Buckeye states that unless the Commission makes this requested change, the December 2019 Order is arbitrary and capricious and cannot meet the requirements of reasoned decision-making under the law and well settled precedent.[778] Buckeye explains that it is a small load-serving entity and does not have its own LDA or transmission, which may prevent it from using the existing FRR Alternative. Buckeye states that its overall load matches its generation, but that this generation and load is spread through several different LDAs, and may not match up within each LDA, separately, for the FRR.[779]

360. AES requests the Commission adopt the same reserve requirement for the FRR Alternative as the rest of the capacity market. AES argues that the December 2019 Order encourages states or load-serving entities to exit the market in favor of the FRR Alternative, which AES contends may harm reliability because FRR entities are currently required to maintain lower reserve margins.[780]

### b. Commission Determination

361. We grant EPSA/P3's request for clarification that the December 2019 Order does not make any findings with regard to the justness and reasonableness of the existing FRR Alternative.

362. Parties arguing that the existing FRR Alternative is not a viable option or is ill-suited to the particular needs of states or load-serving entities misconstrue the December 2019 Order's statements regarding the FRR Alternative. The Commission did not suggest that the FRR Alternative is an accommodation mechanism for State-Subsidized Resources. Rather, the FRR Alternative is just that, an alternative to the capacity market.

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[776] Consumer Representatives Rehearing and Clarification Request at 44-45.

[777] Buckeye Clarification and Rehearing Request at 4.

[778] *Id*. at 4-5.

[779] *Id*.

[780] AES Rehearing and Clarification Request at 14.

The capacity market's objective is to procure the least-cost, competitively-priced combination of resources necessary to meet the multi-state region's reliability objectives on a three-year forward basis. The FRR Alternative permits load-serving entities to construct their own resource adequacy plans and procure the necessary capacity to meet this plan outside the capacity market. The capacity market and FRR Alternative are thus two different resource adequacy paradigms, either of which load-serving entities, including self-supply entities, may use. But if entities wish to meet resource adequacy obligations through the capacity market, they must do so in a manner that does not distort capacity prices and undermine resource adequacy at just and reasonable rates.

363. Moreover, that the existing FRR Alternative may be better suited for some load-serving entities and states, but not others, does not call into question the December 2019 Order's finding. States and load-serving entities may each determine what resource adequacy frameworks are best suited for their individual needs, consistent with the premise that if entities and states choose to participate in the capacity market, they must do so competitively.[781]

364. Clean Energy Advocates point out that when the Commission accepted PJM's proposed self-supply exemption in 2013, the Commission dismissed arguments that a self-supply exemption was not needed because the FRR Alternative is available. However, in 2013, the Commission merely found that the option to use the FRR Alternative did not mean that PJM's request to establish a self-supply exemption was not just and reasonable, meaning that the FRR Alternative did not bear on the just and reasonableness of the self-supply exemption. Similarly, here, the December 2019 Order merely stated that the existing FRR Alternative is available to utilities not wishing to be subject to the replacement rate. The December 2019 Order did not find that the existence of the FRR Alternative is a factor making the replacement rate just and reasonable.[782]

365. The Maryland Commission asserts that the December 2019 Order did not explain how it is just and reasonable to use the existing FRR Alternative with the replacement rate, suggesting that it could lead to market power concerns. Other parties assert that additional entities using the FRR Alternative could result in lower clearing prices, a

[781] *NJBPU*, 744 F.3d at 102 (opining that while the FRR Alternative may not be a viable alternative for some entities, because there is no authority requiring the Commission to provide an alternative to the capacity market, the "lack of a feasible alternative that would allow states and load-serving entities to avoid having their capacity sell offers mitigated" is not fatal to the Commission's MOPR determinations).

[782] Nor does the fact that single customer entities may not use the FRR Alternative lead to the conclusion that single customer entities are discriminated against or call into the question the December 2019 Order. The December 2019 Order does not change the FRR Alternative's eligibility requirements.

diminished capacity market, lost market efficiencies, and harm to reliability. These arguments are outside the scope of this proceeding. The December 2019 Order determined how the expanded MOPR would be applied to resources in order to ensure just and reasonable capacity prices.

366. Likewise, we do not address parties' arguments that the existing FRR Alternative does not work in retail choice states. Because changes to the existing FRR Alternative are beyond the need to address the impact of State Subsidies, these arguments are outside the scope of this proceeding.

367. For the same reason, we decline to address requested changes to the existing FRR Alternative. Not only are such requests outside the scope, but the justness and reasonableness of the FRR Alternative was not under debate in this proceeding and thus the record does not support changes to the FRR Alternative. Should PJM and/or stakeholders wish to propose changes to the existing FRR Alternative, they are free to do so in a separate proceeding.

### H. Auction Timeline and Transition Mechanism

#### 1. Rehearing and Clarification Requests

368. EPSA/P3 urge the Commission to require PJM to conduct its next two BRAs before the end of 2020, as recommended by the Market Monitor, and resist calls for unnecessary delay.[783] EPSA/P3 argue that such a timetable is feasible and necessary to prevent further delay relating to the 2022/2023 delivery year.

369. The DC Commission urges the Commission to consider waiving the application of the expanded MOPR for the upcoming auction and instead implement those changes for the 2020 BRA, to help states and the District of Columbia plan and implement any changes required as a result of the replacement rate.[784]

370. FEU argues that, in the upcoming auction, market participants may not have sufficient time to consider or elect the existing FRR Alternative, given that PJM's Tariff currently requires load-serving entities to elect the FRR Alternative no later than four months before the auction.[785] FEU explains that election of the FRR Alternative is only

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[783] EPSA/P3 Rehearing and Clarification Request at 4.

[784] DC Commission Rehearing and Clarification Request at 12.

[785] FEU Rehearing and Clarification Request at 2.

reversable under certain limited circumstances and four months may not be sufficient time.[786]

371. The Maryland Commission contends the Commission should instruct PJM to delay the BRA until no earlier than May 2021.[787] The Maryland Commission asserts that states need more time to digest the new market rules and states will need a full legislative session to consider options for state preferred resources excluded from clearing the PJM capacity market.[788]

372. NEI, OPSI, and the Illinois Commission argue that the December 2019 Order erred in dismissing requests for a transition mechanism. NEI and the Illinois Commission assert that a transition mechanism is needed, relative to the replacement rate approved in the December 2019 Order, because there may not be sufficient time for entities to adopt PJM's existing FRR Alternative, to the extent state approval is required.[789] OPSI and the Illinois Commission add that if the Commission does not permit states enough time and opportunity to respond to the complex challenges presented by an expanded MOPR, certain resources affected by state policy may be forced offline or prevented from entering the market, thus nullifying state policy decisions.[790]

### 2. <u>Commission Determination</u>

373. We deny rehearing of the December 2019 Order on the issue of PJM's upcoming auction timelines. We expect the next annual capacity auction to be held under the replacement rate and PJM is in the best position to propose timing. We also deny rehearing of the December 2019 Order on the issue of transition mechanisms. The Commission's orders in this proceeding have consistently supported the proposition that PJM's pre-existing Tariff is unjust and unreasonable and requires changes to ensure it

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[786] *Id*. at 5-6.

[787] Maryland Commission Rehearing and Clarification Request at 17.

[788] *Id*. at 17-18

[789] NEI Rehearing Request at 14; Illinois Commission Rehearing Request at 23.

[790] Illinois Commission Rehearing Request at 23; OPSI Rehearing and Clarification Request at 10; *see also* Ohio Commission Rehearing Request at 26 (requesting a transition mechanism).

accounts for increasing out-of-market support for resources.[791] The December 2019 Order further found that PJM's replacement rate should be implemented without a transition mechanism.[792] NEI and OPSI continue to insist that a bridge of some kind is required because there *may* not be sufficient time for entities to adopt PJM's existing FRR Alternative, or because certain State-Subsidized Resources may be forced offline or prevented from entering the market. However, we are not persuaded that these concerns, on balance, outweigh the benefits of a competitive market, or otherwise address the threats, as outlined by the Commission's orders in this proceeding.

## I. Alternative Proposals

### 1. Rehearing and Clarification Requests

374. AES and the Maryland Commission argue that the Commission failed to consider their preferred alternative approaches to address resources that receive out-of-market support. AES asserts as error the Commission's rejection of a proportional MOPR accounting for differences in the magnitude of state subsidies and their proportional impact on PJM's capacity market.[793] The Maryland Commission argues that the Commission erred in rejecting its proposed version of a competitive carve-out allowance, to fully accommodate state-supported resources.[794]

375. FEU and OCC argue that the December 2019 Order erred by failing to adopt revisions beyond PJM's capacity market. FEU asserts that the Commission erred by failing to address its proposed holistic market reform approach, covering all of PJM's markets, including issues related to resilience, fuel security, and fuel diversity.[795] The Ohio Commission argues that the December 2019 Order failed to adopt mitigation for the negative effect of subsidized generation in PJM's energy and ancillary services markets.[796]

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[791] *See, e.g.*, June 2018 Order, 163 FERC ¶ 61,236 at P 1; December 2019 Order, 169 FERC ¶ 61,239 at P 7.

[792] December 2019 Order, 169 FERC ¶ 61,239 at P 219.

[793] AES Rehearing and Clarification Request at 5.

[794] Maryland Commission Rehearing and Clarification Request at 20.

[795] FEU Rehearing and Clarification Request at 3.

[796] OCC Rehearing Request at 3.

### 2. Commission Determination

376. We deny rehearing of the December 2019 Order regarding parties' alternative proposals. The Commission, in this proceeding, was not required to determine whether its replacement rate was more, or less, reasonable than the alternative proposals advanced by intervenors.[797] Likewise, the Commission also did not err in not expanding the scope of this proceeding as suggested by FEU and the Ohio Commission.

### 3. Additional Issue

377. We reject Public Citizen's argument that PJM's stakeholder process is unjust and unreasonable because it "bans" Public Citizen from meaningful participation.[798] The rules governing PJM's stakeholder process were not at issue or addressed in the December 2019 Order, and are outside the scope of this proceeding.

## J. Other Requests for Clarification

### 1. Voluntary RECs

#### a. Requests for Clarification

378. Parties request that the Commission clarify that purely voluntary bilateral transactions for RECs are not considered State Subsidies.[799] Parties argue these

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[797] *See Petal Gas Storage, L.L.C. v. FERC*, 496 F.3d 695, 703 (D.C. Cir. 2007) ("FERC is not required to choose the best solution, only a reasonable one"); *Cal. Indep. Sys. Operator Corp.*, 128 FERC ¶ 61,282, at P 31 (2009) (having found the independent system operator's proposal just and reasonable, the Commission was not required to assess the justness and reasonableness of an alternative proposal); *ISO New England Inc.*, 153 FERC ¶ 61,223, at P 90 (2015) (it is well established that there can be more than one just and reasonable rate).

[798] Public Citizen Rehearing Request at 4.

[799] EKPC Rehearing and Clarification Request at 17; EPSA/P3 Rehearing and Clarification Request at 16-17; Buyers Group Clarification and Rehearing Request at 10; Pennsylvania Commission Rehearing and Clarification Request at 11; Advanced Energy Entities Rehearing and Clarification Request at 26-27 (joining with Buyers Group); Clean Energy Associations Rehearing and Clarification Request at 58-59 (arguing that subjecting voluntary RECs to the MOPR would exceed the Commission's authority under the FPA); Exelon Rehearing and Clarification Request at 31-32; Consumer Representatives Rehearing and Clarification Request at 27; Illinois Attorney General

transactions are not influenced by state policy or otherwise meet the definition of State Subsidy and should not be considered State Subsidies.[800] Parties argue that, contrary to the December 2019 Order's findings, voluntary RECs are often distinguishable from state-mandated RECs.[801]

379. Several parties request clarification that PJM may propose a process to allow a resource to demonstrate it receives only voluntary RECs that will not be used for compliance with a state RPS program or other state mandate.[802] Buyers Group requests that the Commission clarify that, at minimum, a renewable energy project selling its output to a voluntary off-taker who will retire and not resell RECs created the by the project will be exempt from the MOPR.[803] Buyers Group contends that voluntary renewable energy purchases may include, but are not limited to, power purchase agreements, virtual or financial power purchase agreements, market REC purchases, utility REC programs, and utility green tariff programs.[804] Vistra offers two possible approaches to distinguish voluntary RECs from RECs used to satisfy RPS programs: (1) PJM could require resources receiving voluntary REC revenues to demonstrate that such RECs have been sold to buyers that will voluntarily retire the RECs or (2) PJM could establish as a proxy the percentage of RECs that are retired voluntarily in relevant jurisdictions based on historical averages and update this percentage periodically.[805]

Rehearing Request at 16; Vistra Clarification Request at 2; Dominion Rehearing and Clarification Request at 9, 22; PJM Rehearing and Clarification Request at 17-19.

[800] ELCON Rehearing Request at 10; Clean Energy Associations Rehearing and Clarification Request at 58 (citing December 2019 Order, 169 FERC ¶ 61,239 at P 67); EKPC Rehearing and Clarification Request at 13-14; Illinois Attorney General Rehearing Request at 16.

[801] PJM Rehearing and Clarification Request at 18-19 (arguing that the Commission should have accepted PJM's proposed exemption); EKPC Rehearing and Clarification Request at 13-14 (citing PJM Initial Testimony at 21-22 (filed Oct. 2, 2018)); Consumer Representatives Rehearing and Clarification Request at 27-28.

[802] EKPC Rehearing and Clarification Request at 17; EPSA/P3 Rehearing and Clarification Request at 16-17; Buyers Group Clarification and Rehearing Request at 4, 13.

[803] Buyers Group Clarification and Rehearing Request at 4, 13.

[804] *Id*. at 9.

[805] Vistra Clarification Request at 3-4.

380. Should the Commission not grant this clarification, the Pennsylvania Commission requests rehearing to either find that they are not State Subsidies or to allow parties to seek a Competitive Exemption by documenting that these are bilateral agreements.[806]

### b. Commission Determination

381. We grant clarification that purely voluntary transactions for RECs are not considered State Subsidies.[807] New and existing resources, other than new gas-fired resources, that apply for the Competitive Exemption may, as part of that process, certify that they will only sell their RECs through voluntary REC arrangements, meaning those which are not associated with state-mandated or state-sponsored procurement. Such new and existing resources (other than new gas-fired resources) must likewise ensure that no broker or direct buyer will resell voluntary RECs to state compliance purchasers.[808]

## 2. State Default Service Auctions

### a. Requests for Rehearing or Clarification

382. Parties request rehearing or clarification that state-organized default service procurement programs are not State Subsidies.[809] PJM contends that state default service programs are mechanisms by which load-serving entities in retail choice states acquire obligations to provide energy and related services to retail customers through state-directed auctions. Absent any reason to believe that winning load-serving entities in such auctions are receiving out-of-market payment for resources they then procure to provide

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[806] Pennsylvania Commission Rehearing and Clarification Request at 11; *see also* EKPC Rehearing and Clarification Request at 17.

[807] This determination relates to the State Subsidy definition and we are not opining on the effect of voluntary RECs on capacity market outcomes.

[808] The treatment of voluntary RECs in this order is not a determination regarding whether the revenue from voluntary REC transactions results or could result in capacity market distortions; this proceeding, and the evidence presented herein, was limited to the effect of State Subsidies.

[809] DC Commission Rehearing and Clarification Request at 1-3; PJM Rehearing and Clarification Request at 23; New Jersey Board Rehearing and Clarification Request at 44-45; Market Monitor First Clarification Request at 2 (arguing the New Jersey Basic Generation Service auction is not a subsidy); Pennsylvania Commission Rehearing and Clarification Request at 13; Consumers Coalition Rehearing Request at 43-44 (seeking clarification that prongs one and two do not cover state auctions to serve default load).

such retail service, it is not apparent how these actions constitute a State Subsidy, argues PJM.[810]

383. The DC Commission requests clarification as to whether the MOPR applies to the DC Standard Offer Service auction stating that under the auction, the electric distribution company signs a contract with the winning wholesale bidders to procure full requirement services for retail default customers in a competitive process. The DC Commission argues that these competitive processes are not subsidies because suppliers are already on a level playing field.[811] The DC Commission argues that offerors in its Standard Offer Service auction must comply with DC's RPS program, but that a MOPR is not needed because both the Standard Offer Service auction and the RPS program are based on state legislation that has been in place for years.[812]

384. The New Jersey Board argues that its auction is competitive and open to any electricity sellers, without discrimination.[813] The New Jersey Board also argues that the Basic Generation Service auction is best viewed as a hedging mechanism used by state regulators, exercising their plenary powers over retail sales, to ensure a fair procurement process for retail load. In addition, the New Jersey Board explains that the Basic Generation Service auction is voluntary, meaning the costs are bypassable for retail customers.[814] Finally, the New Jersey Board explains that there is typically no direct link between the state's Basic Generation Service contract and the continued operation of any particular resource, because the participants in the auction are typically power marketers "electing to use financial or physical hedging to ensure competitive pricing."[815]

385. The Pennsylvania Commission explains that, in Pennsylvania, electric distribution companies conduct state-commission-approved default service supply procurements for "full requirements" supply contracts, including energy, capacity, ancillary, and certain transmission related services. The Pennsylvania Commission states that these procurements are not "generator unit specific" and are open to any wholesale supplier. The Pennsylvania Commission also states that these auctions procure alternative energy credits required under Pennsylvania legislation, which can be traced to specific resources

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[810] PJM Rehearing and Clarification Request at 23.

[811] DC Commission Rehearing and Clarification Request at 5-6.

[812] *Id*. at 6.

[813] New Jersey Board Rehearing and Clarification Request at 47.

[814] *Id*. at 48.

[815] *Id*.

and should not render the entire auction a State Subsidy. Therefore, the Pennsylvania Commission requests the Commission grant an ongoing competitive exemption for such auctions to encourage continued competitive market procurements in PJM markets.[816]

**b. Commission Determination**

386. We deny rehearing and clarification requests regarding state default service auctions. State default service auctions meet the definition of State Subsidy to the extent they are a payment or other financial benefit that is a result of a state-sponsored or state-mandated process and the payment or financial benefit is derived from or connected to the procurement of electricity or electric generation capacity sold at wholesale, or an attribute of the generation process for electricity or electric generation capacity sold at wholesale, or will support the construction, development, or operation of a capacity resource, or could have the effect of allowing a resource to clear in any PJM auction. If these auctions are truly competitive, as parties assert, and a winning resource wishes to offer below the default offer price floor for its resource type, the resource may demonstrate that its costs are competitive through the Unit-Specific Exemption, or qualify for another exemption elaborated on in the December 2019 Order. Nor do we find it meaningful that the New Jersey Basic Generation Service auction is voluntary or used by power marketers because a state default service auction qualifies as a State Subsidy because it is a state- sponsored process and includes indirect payments to the resource.

**3. Carbon pricing/Regional Greenhouse Gas Initiative (RGGI)**

**a. Requests for Clarification**

387. Parties ask the Commission to clarify that carbon pricing programs, like RGGI, are not considered State Subsidies.[817] Parties argue that RGGI should not be considered a State Subsidy because it does not provide payments to generators, but rather collects

[816] Pennsylvania Commission Rehearing and Clarification Request at 13.

[817] EPSA/P3 Rehearing and Clarification Request at 13; Pennsylvania Commission Rehearing and Clarification Request at 12 (arguing no carbon pricing program should be considered a subsidy); PJM Rehearing and Clarification Request at 22-23; AES Rehearing and Clarification Request at 2; Calpine Clarification and Rehearing Request at 1-2, 4-7 (arguing no carbon pricing program should be considered a subsidy); Delaware DPA Clarification and Rehearing Request at 2, 6; Market Monitor First Clarification Request at 2; New Jersey Board Rehearing and Clarification Request at 44-45; Exelon Rehearing and Clarification Request at 30-31 (stating that including RGGI would cover virtually the entire market); Maryland Commission Rehearing and Clarification Request at 6, 25; Consumer Representatives Rehearing and Clarification Request at 43.

payments from generators and provides them to the states.[818] EPSA/P3 explain that resources in participating states are required to purchase emissions allowances sufficient to cover their emissions above the cap through either regional auctions or secondary market transactions.[819]

388. PJM contends that RGGI is like any other environmental regulation or limit on power plants, that the auction permits those resources that emit CO2 can compete between one another to determine the price per-ton each will pay that quarter for CO2 emissions. PJM states that the auction is not a purchase of clean power credits sold by renewable resources, and thus the RGGI cap and auction system is not a subsidy any more than any other environmental limit on a resource.[820] EPSA/P3 argue that RGGI is consistent with competitive markets and does not provide the sort of out-of-market payments discussed in the December 2019 Order.[821] The Pennsylvania Commission argues that RGGI is not connected to the PJM auction.[822]

389. The New Jersey Board states that the Commission has found that emission trading costs are appropriately included in energy offers.[823] The New Jersey Board further argues that applying the MOPR to RGGI raises due process issues because it was not discussed on the record, nor did the Commission clearly explain its rationale for doing so.[824] Delaware DPA contends that there is only one instance in which RGGI should be considered a State Subsidy—when a state pays RGGI revenue to a specific resource in the state.[825]

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[818] EPSA/P3 Rehearing and Clarification Request at 13; Pennsylvania Commission Rehearing and Clarification Request at 12; Delaware DPA Clarification and Rehearing Request at 12-13.

[819] EPSA/P3 Rehearing and Clarification Request at 13.

[820] PJM Rehearing and Clarification Request at 22-23.

[821] EPSA/P3 Rehearing and Clarification Request at 14; s*ee also* New Jersey Board Rehearing and Clarification Request at 45.

[822] Pennsylvania Commission Rehearing and Clarification Request at 12.

[823] New Jersey Board Rehearing and Clarification Request at 45-46.

[824] *Id*. at 46-47.

[825] Delaware DPA Clarification and Rehearing Request at 13-14.

### b. Commission Determination

390. We grant clarification that RGGI is not considered a State Subsidy because RGGI does not provide payments, concessions, rebates, or other financial benefits to resources. However, we also clarify that, while RGGI fees paid by resources are not a State Subsidy, RGGI revenues paid to certain resources would be considered a State Subsidy, assuming it meets the criteria in the definition. We decline to address arguments regarding carbon pricing programs generally, as we do not prejudge future programs or those on which do not have a record.

## 4. Other

### a. Requests for Clarification

391. J-POWER requests that the Commission clarify that the expanded MOPR will apply to all resources in the PJM region and not only to resources in LDAs for which a separate demand curve is established.[826] J-POWER explains that PJM and the Market Monitor have interpreted the current MOPR to be limited in this fashion.[827]

392. The Market Monitor requests clarification all new natural gas-fired resources, regardless of location, would be subject to the MOPR and that that default offer price floor would be equal to 100% of default Net CONE or Net ACR.[828] The Market Monitor also requests clarification regarding whether the Commission intends to apply the current MOPR only to new, including repowered, natural gas-fired resources, regardless of technology type, or to all resources types identified in the current Tariff.[829] The Market Monitor requests the Commission clarify that if a resource partially clears the capacity market, only the cleared portion is considered existing.[830]

393. The Market Monitor requests the Commission clarify what changes to the demand resource offer rules are necessary to implement the December 2019 Order. The Market Monitor contends that it will be necessary to require that demand response aggregators have a contract with actual resources before offering as demand response in the capacity

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[826] J-POWER Clarification Request at 2.

[827] *Id*. at 4 (citing PJM OATT, Attach. DD, § 5.14(h)(4)).

[828] Market Monitor Second Clarification Request at 3.

[829] Market Monitor First Clarification Request at 3 (citing PJM OATT, Attach. DD, § 5.14 (h)).

[830] *Id*.

auction.[831] AEMA requests clarification that the December 2019 Order does not prevent PJM from continuing to allow demand response or energy efficiency resources to aggregate.[832] CPower/LS Power request that the Commission clarify that demand aggregators should not be required to have customers under contract before offering into the auction. CPower/LS Power point out that customers typically make participation decisions in a shorter timeline than the three-year forward auction, particularly as some customers switch aggregators in search of a better deal. CPower/LS Power state that requiring commitments three years out would limit competition to the detriment of end-use customers.[833]

394. The Market Monitor further requests clarification that subsidized capacity resources cannot serve as replacement capacity for unsubsidized capacity resources.[834] EKPC requests that the Commission deny this clarification request, arguing that clarifying so would prevent or limit the ability of any new capacity resource to replace an existing resource of an electric cooperative, forcing EKPC to purchase additional capacity from the PJM market, resulting in double payment.[835]

395. OPSI requests that the Commission clarify that generation resources financially benefiting from transmission resources planned by PJM pursuant to the public policy provisions of Order No. 1000[836] are not subject to the State Subsidy definition set forth in the December 2019 Order.[837] OPSI asserts that such a result would bring about further conflict among the Commission's Orders, leading to an arbitrary and capricious result.[838] Similarly, the Maryland Commission requests clarification that transmission resources

[831] Market Monitor First Clarification Request at 5-6.

[832] AEMA Clarification Request at 3-4.

[833] CPower/LS Power Rehearing and Clarification Request at 10-11.

[834] Market Monitor Second Clarification Request at 3.

[835] EKPC Answer at 4-5.

[836] *See Transmission Planning & Cost Allocation by Transmission Owning & Operating Pub. Utils.*, Order No. 1000, 136 FERC ¶ 61,051 (2011), *order on reh'g and clarification*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff'd sub nom. S.C. Pub. Serv. Auth.*, 762 F.3d 41.

[837] OPSI Rehearing and Clarification Request at 12.

[838] *Id*. at 13.

planned by PJM pursuant to Order No. 1000 public policy provisions and sponsored by states attempting to meet public policy goals by delivering power to state-preferred generation resources do not cause the generation resource to receive a State Subsidy.[839]

396. Clean Energy Advocates state that the Commission should clarify that the general provisions of metering services and meter data do not constitute a State Subsidy triggering the MOPR for demand resources and energy efficiency resources, even when such services are funded by retail rate riders.[840]

**b. Commission Determination**

397. We clarify that the December 2019 Order did not order any changes to PJM's existing natural-gas MOPR. PJM's compliance filing should not contain any substantive changes to that section unrelated to the replacement rate. With respect to the expanded MOPR, State-Subsidized Resources will be subject to the MOPR regardless of their location.

398. We grant the Market Monitor's request for clarification that only the cleared portion of a resource is considered existing, unless otherwise specified in this order.

399. We reject the Market Monitor's request that the Commission clarify what changes to the demand response resource offer rules are necessary to implement the December 2019 Order. Those rules were not at issue at in the December 2019 Order and so the Commission does not have a record on which to base this clarification. The December 2019 Order did recognize that some changes to the demand response resource offer rules may be necessary to accommodate the application of the MOPR as described in the December 2019 Order, including requiring demand response resource aggregators to contract with resources sooner, and directed PJM to file any such changes on compliance.[841] However, we have not yet directed PJM to make that change and will not prejudge PJM's compliance filing here. Similarly, we clarify that the December 2019 Order did not make a finding on whether resources would continue to be able to aggregate, and we decline to do so here.

400. With respect to the Market Monitor's other request, we clarify that, to the extent the Market Monitor refers to replacement capacity bilaterally procured to fulfill a capacity commitment, capacity from State-Subsidized Resources cannot serve as replacement capacity for unsubsidized capacity resources.

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[839] Maryland Commission Rehearing and Clarification Request at 6, 25.

[840] Clean Energy Advocates Rehearing Request at 52.

[841] December 2019 Order, 169 FERC ¶ 61,239 at P 144 n.297.

401. We decline to address OPSI's and the Maryland Commission's broad requests for clarification concerning whether any Order No. 1000-related benefits generators may accrue are State Subsidies. The requests raise issues that require fact-specific determinations and are more appropriately addressed in a compliance proceeding or other separate proceeding.

402. With regard to Clean Energy Advocates' request, we reiterate that resources receiving any out-of-market payment that meets the definition of State Subsidy outlined in the December 2019 Order will be subject to the expanded MOPR, unless they qualify for one of the limited exemptions.

The Commission orders:

(A) Requests for rehearing are hereby granted in part, and denied in part, as discussed in the body of this order.

(B) Requests for clarification are hereby granted in part, and denied in part, as discussed in the body of this order.

(C) PJM is directed to submit a compliance filing within 45 days of the date of this order, as discussed in the body of this order.

By the Commission. Commissioner Glick is dissenting with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix

**Parties Requesting Rehearing and/or Clarification**

Advanced Energy Buyers Group (Buyers Group)
Advanced Energy Economy and Advanced Energy Management Alliance (Advanced Energy Entities)
Advanced Energy Management Alliance (AEMA)
Allegheny Electric Cooperative, Inc. (Allegheny)
American Electric Power Service Corporation and Duke Energy Corporation (AEP/Duke)
American Public Power Association, American Municipal Power, Inc., and Public Power Association of New Jersey (Public Power Entities)
American Wind Energy Association, Solar Energy Industries Association, Advance Energy Economy, America Council on Renewable Energy, and the Solar Council (Clean Energy Associations)
AES Corporation (AES)
Buckeye Power, Inc. (Buckeye)
Calpine Corporation (Calpine)
Delaware Division of the Public Advocate (Delaware DPA)
District of Columbia Attorney General (DC Attorney General)
Dominion Energy Services Company, Inc. (Dominion)
East Kentucky Power Cooperative, Inc. (EKPC)
Electric Power Supply Association and the PJM Power Providers Group (EPSA/P3)
Electricity Consumers Resource Council (ELCON)
Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, Sustainable FERC Project, and Union of Concerned Scientists (Clean Energy Advocates)
Enerwise Global Technologies, Inc., d/b/a/ CPower and LS Power Associates, L.P. (CPower/LS Power)
Exelon Corporation (Exelon)
FirstEnergy Solutions Corp. (FES)
FirstEnergy Utility Companies (FEU)
Illinois Attorney General (Illinois Attorney General)
Illinois Commerce Commission (Illinois Commission)
Illinois Municipal Electric Agency (IMEA)
J-POWER USA Development Co., LTD (J-POWER)
Maryland Public Service Commission (Maryland Commission)
Monitoring Analytics, Inc., acting as PJM Independent Market Monitor (Market Monitor)

National Rural Electric Cooperative Association and
East Kentucky Power Cooperative, Inc. (NRECA/EKPC)
New Jersey Board of Public Utilities (New Jersey Board)
New Jersey Division of Rate Counsel, Office of Peoples'
Counsel for the District of Columbia, and the Maryland
Office of Peoples; Counsel (Consumers Coalition)
North Carolina Electric Membership Corporation (NCEMC)
Nuclear Energy Institute (NEI)
Ohio Consumers' Counsel (OCC)
Old Dominion Electric Cooperative (ODEC)
Organization of PJM States, Inc. (OPSI)
Pennsylvania Public Utility Commission (Pennsylvania Commission)
PJM Industrial Customer Coalition, Illinois Industrial Energy
Consumers, Electricity Consumers Resource Council,
Industrial Energy Consumers of America, Pennsylvania
Energy Consumer Alliance, Industrial Energy Consumers
Of Pennsylvania, and American Forest and Paper
Association (Consumer Representatives)
PJM Interconnection, L.L.C. (PJM)
PSEG Companies (PSEG)
Public Citizen, Inc. (Public Citizen)
Public Service Commission of the District of Columbia (DC Commission)
Public Utilities Commission of Ohio (Ohio Commission)
Public Service Commission of West Virginia (West Virginia Commission)
Southern Maryland Electric Cooperative, Inc. (SMECO)
Vistra Energy Corp. and Dynegy Marketing and Trade, LLC (Vistra)

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Calpine Corp.; Dynegy Inc.; Eastern Generation, LLC; Homer City Generation, L.P.; NRG Power Marketing LLC; GenOn Energy Management, LLC; Carroll County Energy LLC; C.P. Crane LLC; Essential Power, LLC; Essential Power OPP, LLC; Essential Power Rock Springs, LLC; Lakewood Cogeneration, L.P.; GDF SUEZ Energy Marketing NA, Inc.; Oregon Clean Energy, LLC; and Panda Power Generation Infrastructure Fund, LLC<br><br>v.<br><br>PJM Interconnection, L.L.C.<br><br>PJM Interconnection, L.L.C. | Docket Nos. | EL16-49-002<br>EL18-178-002<br>(Consolidated) |

(Issued April 16, 2020)

GLICK, Commissioner, *dissenting*:

1. From the beginning, this proceeding has been about two things: Dramatically increasing the price of capacity in PJM Interconnection, L.L.C. (PJM) and slowing the region's transition to a clean energy future. Today's orders on rehearing make that even more clear.[1] Accordingly, I dissent as strongly as I can from both orders, which are illegal, illogical, and truly bad public policy.

2. The Commission started down this road in June 2018, when it is issued a deeply misguided order finding that PJM's capacity market was unjust and unreasonable because it did not prevent state public policies from influencing the resource mix in PJM's

[1] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,035 (2020) (December 2019 Rehearing Order); *Calpine Corp. v. PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,034 (2020) (June 2018 Rehearing Order).

capacity market.[2] Then-Commissioner LaFleur aptly described that decision, which was based on a tenuous theory and a thin record, as "a troubling act of regulatory hubris."[3] To address the purported problems with the capacity market, the June 2018 Order proposed a so-called "resource-specific FRR Alternative"[4] that would have bifurcated the market and cordoned off state-sponsored resources.

3. Then, in December 2019, after a year and a half of indecision, the Commission took a sharp right turn, altogether abandoning the resource-specific FRR Alternative in favor of a radical effort to extirpate state subsidies from the capacity market.[5] That order established a sweeping definition of state subsidy that will subject much, if not most, of the resources in PJM's capacity market to a minimum offer price rule (MOPR). In so doing, the Commission turned the "market" into a system of bureaucratic pricing so pervasive that it would have made the Kremlin economists in the old Soviet Union blush. In addition, the order created a number of exemptions to the MOPR that will have the principal effect of entrenching the current resource mix by excluding several classes of existing resources from mitigation. Finally, in ditching the resource-specific FRR Alternative, the Commission made clear that it had no concern for the interests of states seeking to exercise their authority over generation resources or for the customers that would be left to pick up the tab.

4. Today's orders affirm the conclusions in both the June 2018 and December 2019 Orders with a degree of condescension that is unbecoming of an agency of the federal government. And, as if that were not enough, today's orders show no interest in the careful, detailed analysis that has long been the Commission's hallmark. Instead, they turn away the several dozen rehearing requests with little more than generalities and claims that the parties misunderstood the underlying orders or the governing law—a charge that often more accurately describes the Commission's orders today than it does

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[2] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 (2018) (June 2018 Order).

[3] *Id.* (LaFleur, Comm'r, dissenting at 5) ("The majority is proceeding to overhaul the PJM capacity market based on a thinly sketched concept, a troubling act of regulatory hubris that could ultimately hasten, rather than halt, the re-regulation of the PJM market.").

[4] "FRR" stands for Fixed Resource Requirement.

[5] *Calpine Corp. v. PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,239 (2019) (December 2019 Order).

those rehearing requests.[6] All parties deserve better from this Commission, even the ones that will benefit financially from today's orders.

## I. <u>Today's Orders Unlawfully Target a Matter under State Jurisdiction</u>

5. The FPA is clear. The states, not the Commission, are the entities responsible for shaping the generation mix. Although the FPA vests the Commission with jurisdiction over wholesale sales of electricity as well as practices affecting those wholesale sales,[7] Congress expressly precluded the Commission from regulating "facilities used for the generation of electric energy."[8] Congress instead gave the states exclusive jurisdiction to regulate generation facilitates.[9]

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[6] Today's orders address both the requests filed in response to the June 2018 Order and the December 2019 Order. Unless otherwise indicated, citations to rehearing requests refer to requests filed in response to the December 2019 Order.

[7] Specifically, the FPA applies to "any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission" and "any rule, regulation, practice, or contract affecting such rate, charge, or classification." 16 U.S.C. § 824e(a) (2018); *see also id.* § 824d(a) (similar).

[8] *See id.* § 824(b)(1) (2018); *Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1292 (2016) (describing the jurisdictional divide set forth in the FPA); *FERC v. Elec. Power Supply Ass'n*, 136 S. Ct. 760, 767 (2016) (*EPSA*) (explaining that "the [FPA] also limits FERC's regulatory reach, and thereby maintains a zone of exclusive state jurisdiction"); *Panhandle E. Pipe Line Co. v. Pub. Serv. Comm'n of Ind.*, 332 U.S. 507, 517-18 (1947) (recognizing that the analogous provisions of the NGA were "drawn with meticulous regard for the continued exercise of state power"). Although these cases deal with the question of preemption, which is, of course, different from the question of whether a rate is just and reasonable under the FPA, the Supreme Court's discussion of the respective roles of the Commission and the states remains instructive when it comes to evaluating how the application of a MOPR squares with the Commission's role under the FPA.

[9] 16 U.S.C. § 824(b)(1); *Hughes*, 136 S. Ct. at 1292; *see also Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 205 (1983) (recognizing that issues including the "[n]eed for new power facilities, their economic feasibility, and rates and services, are areas that have been characteristically governed by the States").

6. But while those jurisdictional lines are clearly drawn, the spheres of jurisdiction themselves are not "hermetically sealed."[10] One sovereign's exercise of its authority will inevitably affect matters subject to the other sovereign's exclusive jurisdiction.[11] For example, any state regulation that increases or decreases the number of generation facilities will, through the law of supply and demand, inevitably affect wholesale rates.[12] But the existence of such cross-jurisdictional effects is not necessarily a "problem" for the purposes of the FPA. Rather, those cross-jurisdictional effects are the product of the "congressionally designed interplay between state and federal regulation"[13] and the natural result of a system in which regulatory authority over a single industry is divided between federal and state government.[14] Maintaining that interplay and permitting each

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[10] *EPSA*, 136 S. Ct. at 776; *see Oneok, Inc. v. Learjet, Inc.*, 135 S. Ct. 1591, 1601 (2015) (explaining that the natural gas sector does not adhere to a "Platonic ideal" of the "clear division between areas of state and federal authority" that undergirds both the FPA and the Natural Gas Act).

[11] *See EPSA*, 136 S. Ct. at 776; *Oneok*, 135 S. Ct. at 1601; *Coal. for Competitive Elec. v. Zibelman*, 906 F.3d 41, 57 (2d Cir. 2018) (explaining that the Commission "uses auctions to set wholesale prices and to promote efficiency with the background assumption that the FPA establishes a dual regulatory system between the states and federal government and that the states engage in public policies that affect the wholesale markets").

[12] *Zibelman*, 906 F.3d at 57 (explaining how a state's regulation of generation facilities can have an "incidental effect" on the wholesale rate through the basic principles of supply and demand); *id.* at 53 ("It would be 'strange indeed' to hold that Congress intended to allow the states to regulate production, but only if doing so did not affect interstate rates." (quoting *Nw. Cent. Pipeline Corp. v. State Corp. Comm'n of Kansas*, 489 U.S. 493, 512-13 (1989) (*Northwest Central*))); *Elec. Power Supply Ass'n v. Star*, 904 F.3d 518, 524 (7th Cir. 2018) (explaining that the subsidy at issue in that proceeding "can influence the auction price only indirectly, by keeping active a generation facility that otherwise might close . . . . A larger supply of electricity means a lower market-clearing price, holding demand constant. But because states retain authority over power generation, a state policy that affects price only by increasing the quantity of power available for sale is not preempted by federal law.").

[13] *Hughes*, 136 S. Ct. at 1300 (Sotomayor, J., concurring) (quoting *Northwest Central*, 489 U.S. at 518); *id.* ("recogniz[ing] the importance of protecting the States' ability to contribute, within their regulatory domain, to the Federal Power Act's goal of ensuring a sustainable supply of efficient and price-effective energy").

[14] *Cf. Star*, 904 F.3d at 523 ("For decades the Supreme Court has attempted to confine both the Commission and the states to their proper roles, while acknowledging

sovereign to carry out its designated role is essential to the cooperative federalist regime that Congress made the foundation of the FPA.

7. In recent years, the Supreme Court has repeatedly admonished both the Commission and the states that the FPA prohibits actions that "aim at" or "target" the other sovereign's exclusive jurisdiction.[15] Beginning with *Oneok*, the Court underscored that its "precedents emphasize the importance of considering the *target* at which the state law *aims*."[16] The Court has subsequently explained how that general principle plays out in practice when analyzing the limits on both federal and state authority. In *EPSA*, the Court held that the Commission can regulate a practice affecting wholesale rates, provided that the practice "directly" affects those rates and that the Commission does not regulate or target a matter reserved for exclusive state jurisdiction.[17] And, in *Hughes*, the Court returned to this theme, explaining that the FPA prohibits one sovereign from exercising its authority in a manner that aims at or targets the other sovereign's exclusive jurisdiction, which, in that case, meant that a state could not "tether" its regulations to the Commission-jurisdictional wholesale market by requiring the resource to bid and clear in that market in order to secure a subsidy.[18] Together, those cases stand for the unremarkable proposition that the FPA prohibits one sovereign from taking advantage of

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that each use of authorized power necessarily affects tasks that have been assigned elsewhere.").

[15] *E.g., Hughes*, 136 S. Ct. at 1298 (relying on *Oneok*, 135 S. Ct. at 1599, for the proposition that a state may regulate within its sphere of jurisdiction even if its actions "incidentally affect areas within FERC's domain" but that a state may not target or intrude on FERC's exclusive jurisdiction); *EPSA*, 136 S. Ct. at 776 (emphasizing the importance of "'the *target* at which [a] law *aims*'" (quoting *Oneok*, 135 S. Ct. at 1600)); *Oneok*, 135 S. Ct. at 1600 (recognizing "the distinction between 'measures *aimed directly at* interstate purchasers and wholesales for resale, and those aimed at' subjects left to the States to regulate") quoting *N. Nat. Gas Co. v. State Corp. Comm'n of Kan.*, 372 U.S. 84, 94 (1963) (*Northern Natural*))).

[16] *Oneok*, 135 S. Ct. at 1600 (discussing *Northern Natural*, 372 U.S. at 94, and *Northwest Central*, 489 U.S. at 513-14).

[17] *EPSA*, 136 S. Ct. at 775-77; *id.* at 776.

[18] *Hughes*, 136 S. Ct. at 1298, 1299. In the intervening few years, the lower federal courts have carefully followed the Court's discussion of the prohibition on one sovereign regulating in a manner that interferes with the other sovereign's authority by targeting matters subject to their exclusive jurisdiction. *See, e.g., Zibelman*, 906 F.3d at 50-51, 53; *Star*, 904 F.3d at 523-24; *Allco Fin. Ltd. v. Klee*, 861 F.3d 82, 98 (2d Cir. 2017).

the law's cooperative federalist model to aim at or target, and, thus, interfere with, the other sovereign's exclusive jurisdiction.

8. But that is exactly what the Commission's new MOPR does. The record in this proceeding makes unmistakably clear that the purpose and effect of the new MOPR is to interfere with state regulation of generation facilities. Indeed, at every turn, the Commission's has described the new MOPR as targeting the PJM states' exercise of their exclusive jurisdiction to regulate generation facilities under FPA section 201(b). For example, the Commission began its determination section in the June 2018 Order with a discussion of purported problems evidenced in "[t]he records [before it, which] demonstrate that states have provided or required meaningful out-of-market support to resources in the current PJM capacity market, and that such support is projected to increase substantially in the future"[19]—*i.e.*, the simple fact that states are exercising their reserved authority. The Commission explained that states' exercise of their reserved authority created "significant uncertainty" and left other resources unable to "predict whether their capital will be competing against" subsidized or unsubsidized units,[20] again making clear that it is the mere exercise of that authority that is the purported problem. And, ultimately, the Commission found that PJM's tariff was unjust and unreasonable because it did not prevent the ineluctable effects of state action from making their way to the wholesale market.[21]

9. The December 2019 order made the Commission's attempt to interfere with state authority even more clear. Its rationale for the new MOPR was that it was needed to combat increasing state policies and ensure that state actions do not shape entry and exit through the capacity market.[22] In addition, the Commission focused *only* on what it deemed to be states' regulation of generation facilities, explicitly ignoring other state policies that might equally affect wholesale rates, such as so-called general industrial development policies or local siting support.[23] That concession is plain evidence that the

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[19] June 2018 Order, 163 FERC ¶ 61,236 at P 149.

[20] *Id.* P 150.

[21] *Id.* P 156; *EPSA*, 136 S. Ct. at 776 (explaining that because the federal and state spheres of jurisdiction "are not hermetically sealed from each other," " virtually any action" one sovereign takes pursuant to its authority will have "some effect" on matters within the other's sphere of jurisdiction).

[22] December 2019 Order, 169 FERC ¶ 61,239 at P 37.

[23] *Id.* P 83; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 68, 108. The Commission has never attempted to provide a rational justification for that distinction. It certainly did not distinguish between acceptable and unacceptable state

new MOPR is not about the effects of state actions on wholesale rates, but rather all about blocking particular state efforts to shape the generation mix. Indeed, it is irrational in the extreme to profess concern about the effects of state policies on the generation mix, but then completely ignore whole classes of state policies that significantly affect wholesale prices in order to focus exclusively on the particular subsidies that various states have enacted pursuant to their reserved authority under FPA section 201(b). That result, and the Commission's total failure to provide a reasoned explanation for the arbitrary lines it drew, show this proceeding for what it is: An effort aimed directly at state efforts to shape the generation mix, price suppression pretext notwithstanding.[24]

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policies based on their effects on wholesale rates given that there is no record evidence bearing on that point and certainly no discussion of such a distinction in any of the Commission's orders in this proceeding. *See infra* section II.B.1.c. Instead, the Commission asserted that it was concerned only with those state efforts that it determined (again with no analysis) to be "most nearly directed at or tethered to" the wholesale rate. December 2019 Order, 169 FERC ¶ 61,239 at P 68 (internal quotation marks and footnotes omitted); *see* Clean Energy Advocates Rehearing Request at 32 ("The Commission . . . cobbles together a test of whether policies are 'nearly directed at' or 'tethered to' new entry or continued operation of generating capacity. This test, too, lacks any substantive articulation of explanation, and the Commission does not establish how or why such policies would have the greatest impact on rates." (footnotes omitted)). That rather awkward repurposing of a preemption term of art tells us nothing. The term "untethered" first entered the FPA lexicon in *Hughes*, 136 S. Ct. at 1299, and the specific concept of "tethering" described in that opinion has played an important role in subsequent FPA preemption litigation. *E.g., Zibelman*, 906 F.3d at 51-55; *Star*, 904 F.3d at 523-24; *Allco*, 861 F.3d at 102. But until December 2019, it was never used as the yardstick for targeting particular state policies that are concededly "untethered" to the wholesale rate. It is not obvious, and the Commission certainly does not explain, why being a valid exercise of state jurisdiction that is close-to-but-not preempted should be relevant to our analysis, especially if that analysis is nominally only about wholesale market effects. Preemption is a binary determination, which is distinctly unlike horseshoes or hand grenades. The failure to provide a reasoned basis for distinguishing between acceptable and unacceptable state policies is itself arbitrary and capricious and only underscores the extent to which the Commission's order targets state jurisdiction, notwithstanding its scattered statements about price suppression and wholesale rates.

[24] In addition, the disparate treatment that the Commission accords different types of state policies underscores the extent to which it is meddling in state jurisdiction. The new MOPR is laser-focused on mitigating anything that increases a resource's revenue, but expressly excludes anything that decreases its costs. *See infra* Section II.B.1.d; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 390 (explaining that the Commission will not treat the Regional Greenhouse Gas Initiative (RGGI) as a subsidy

10. And, lest there be any doubt, the December 2019 Order made clear that the Commission fully understood the effect of the MOPR on those disfavored state policies. As discussed further below,[25] the Commission refused to extend the MOPR to federal policies because doing so would "nullify" those policies.[26] Indeed, the Commission asserted that federal subsidies "distort competitive market outcomes" every bit as much as state subsidies[27] and that the only reason to refrain from applying the new MOPR to federal subsidies is that the Commission lacks the power to "nullify" or "disregard" federal legislation."[28] That moment of honesty revealed that the Commission knew exactly what its new MOPR did to the state regulation of generation facilities targeted in its order, undercutting its various statements about the MOPR's supposed limited effect on state resource decisionmaking. The problem for the Commission, is that it is equally impermissible for it to use its authority over wholesale rates in an attempt to nullify state regulation of the generation mix and it cannot, consistent with reasoned decisionmaking, insist that the MOPR has one effect on federal policies and a totally different effect on state policies. If the MOPR would nullify federal policies—an assessment with which I agree—than it must equally nullify state policies.

11. And, finally, the December 2019 Order admitted that its purpose was to the disfavored state actions with what the Commission described as "price signals on which investors and consumers can rely to guide the orderly entry and exit of economically

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because it "does not provide payments, concessions, rebates, or other financial benefits to resources" even though it meets every other prong of the Commission's subsidy definition, *see* December 2019 Order, 169 FERC ¶ 61,239 at P 67). That means that, in the Commission's eyes, any state policy that augments a resource's revenue is a "problem" that must be solved, but that any state policy that decreases its relative costs is not. But, in a construct where offer prices are calculated as costs *net* of revenues, *see infra* Section II.B.4, as both the net cost of new entry (Net CONE) and net avoidable cost rate (Net ACR) offer floors are, *see* Section II.B.4, whether a state policy operates on the revenue or cost side of resource's equation is utterly immaterial. Putting aside whether that distinction makes any sense, it shows the extent to which the Commission is meddling in state resource decisionmaking by finding that the effects of certain state policies are legitimate while the identical effects of others are not.

[25] *See infra* Section II.B.1.a.

[26] December 2019 Order, 169 FERC ¶ 61,239 at PP 10, 89.

[27] *Id.* P 10.

[28] *Id.* PP 10, 89.

efficient capacity resources."[29] That is to say, its goal was to establish a set of price signals to determine resource entry and exit in the capacity market *for the explicit purpose* of superseding state resource decisionmaking and to better reflect the Commission's preferences for merchant generators that do not rely on compensation they receive for addressing externalities.

12. In short, the December 2019 Order conceded that the "problem" was state efforts to shape the generation mix, that the Commission was focused *only* on those state efforts, that the Commission's action would "nullify" those state efforts, and that it would override those efforts in order to send price signals that better aligned with the Commission's preferences.[30] That directly targets states' reserved authority under section 201(b).

13. Today's orders erase any lingering doubt about the purpose and effect of the Commission's new MOPR. In addition to affirming its earlier statements, the Commission doubles down on its still unexplained "most nearly tethered" standard, this time describing it as some form of administrative grace for which states should thank their lucky stars.[31] Putting aside the dripping arrogance of that worldview, the only issue that phrase elucidates is the extent to which today's orders are focused on blocking state efforts to shape the resource mix and not on the effects of state policies on wholesale markets.[32] After all, if today's orders were actually concerned with the wholesale-market

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[29] *Id.* P 40.

[30] As discussed further below, it is hard to tally up the cumulative effect of today's orders and find that characterization even remotely accurate. In any case, a policy of blocking state efforts to address externalities is itself very much a policy, not the absence thereof. Elsewhere, the Commission suggests that it lacks the authority to directly address any environmental considerations. *E.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 41. Assuming, for the moment, the accuracy of that statement, it still does not explain why the Commission should or must affirmatively block state efforts to the same using authority that no one contests they possess.

[31] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 78; *see supra* note 23.

[32] As discussed above, *supra note* 23 and accompanying text, the Commission's unexplained focus on only certain state policies, and not others that might equally cause the sort of price suppression about which it purports to be so concerned, lays bare that today's orders is about blocking disfavored state policies and not wholesale market effects. *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106 ("[T]he expanded MOPR is not intended to address all commercial externalities or opportunities that might affect the economics of a particular resource.").

effects of state policies, they would not excuse from the new MOPR general industrial development policies and local siting support—categories which have much larger effects on the wholesale market than many of the policies targeted in today's orders.[33]

14. But that is not even the half of it. A few hundred paragraphs later, the Commission comes right out and admits that its goal is to penalize and, ultimately, discourage states from exercising their exclusive jurisdiction. In patting itself on the back for issuing what it describes as a "decisive order," the Commission laments the fact that its supposedly decisive order was not enough to deter states from continuing to exercise their section 201(b) jurisdiction.[34] But it is no more our role to deter states from regulating generation facilities than it is the states' role to prevent us from ensuring that rates are just and reasonable.[35] And, as the Supreme Court has repeatedly made clear, the FPA does not permit FERC or the states to exercise their authority under the FPA to target the other sovereign's exclusive jurisdiction.[36]

15. All told, this simply is not a proceeding where "the Commission's justifications for regulating . . . are all about, and only about, improving the wholesale market."[37] Unlike the rule upheld in *EPSA*, where the matters subject to state jurisdiction "figure[d] no more in the Rule's goals than in the mechanism through which the Rule operates,"

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[33] *See infra* Section II.B.3.

[34] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 319 ("Even after the June 2018 Order, certain states pursued new or expanded out-of-market support for preferred resources").

[35] Elsewhere in today's orders, the Commission suggests that federal subsidies, presumably in contrast to state subsidies, are as "equally valid" as regulations under the FPA. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 120. There is no basis for the insinuation that state subsidies are somehow less valid than federal ones. Although it is true that state subsidies that directly regulate or aim at the Commission's exclusive jurisdiction or that conflict with a Commission regulation are preempted, *see supra* P 7, the December 2019 Rehearing Order deals with state actions that are concededly not preempted and were enacted pursuant to the states exercise of their reserved authority under the FPA. *See, e.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 76-77. But, although the Commission's "equally valid" rationale is unhelpful as a statement of law, it is a revealing illustration of the attitude toward state authority that pervades the order.

[36] *See supra* P 7.

[37] *EPSA*, 136 S. Ct. at 776 (citing *Oneok*, 135 S. Ct. at 1599).

state actions are front and center in the Commission's justification for acting.[38] To be sure, the Commission doffs its hat to "price suppression" throughout the orders. But repeating the phrase "price suppression" does not change the fact that the Commission's stated concern in the June 2018 Order, the December 2109 Order, and today's orders is the states' exercise of their authority under section 201(b) or the fact that the goal of the new MOPR is to "nullify" and "disregard" the effects of state resource decisionmaking. Similarly, the Commission's observation that it is not literally precluding states from building new resources is beside the point. As I explained in my earlier dissent, that is the equivalent of saying that a grounded teenager is not being punished because he can still play in his room—it deliberately mischaracterizes both the intent and the effect of the action in question.[39]

16. The extent to which the Commission is attempting to interfere with state resource decisionmaking is even clearer with a little context. The MOPR was originally used to mitigate buyer-side market power within the wholesale market[40]—a concern at the heart of the Commission's responsibility to ensure that wholesale rates are just and unreasonable.[41] And for much of the MOPR's history, that is what it did. Even when the

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[38] *Id.*

[39] December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 13).

[40] Specifically, those early MOPRs were designed to ensure that net buyers of capacity were not able to use market power to drive down the capacity market price. *See N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (2020) (Glick, Comm'r, dissenting at P 2); *see generally* Richard B. Miller, Neil H. Butterklee & Margaret Comes, *"Buyer-Side" Mitigation in Organized Capacity Markets: Time for a Change?*, 33 Energy L.J. 459 (2012) (discussing the history of buyer-side mitigation at the Commission).

[41] *See, e.g., Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277, 1280 (D.C. Cir. 2007) (noting that "FERC's authority generally rests on the public interest in constraining exercises of market power"); *Pub. Util. Dist. No. 1 of Snohomish Cty. v. Dynegy Power Mktg., Inc.*, 384 F.3d 756, 760 (9th Cir. 2004) (explaining that the absence of market power could provide a strong indicator that rates are just and reasonable); *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1004 (D.C. Cir. 1990) ("In a competitive market, where neither buyer nor seller has significant market power, it is rational to assume that the terms of their voluntary exchange are reasonable, and specifically to infer that the price is close to marginal cost, such that the seller makes only a normal return on its investment."); *see also N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (Glick, Comm'r, dissenting at P 2) (explaining that "the Commission's buyer-side market power mitigation regime should focus only on actual market power" a concern that "is both more consistent with the FPA's dual-federalist design and the Commission's core responsibility as a regulator of monopoly/monopsony power").

Commission eliminated the categorical exemption for resources developed pursuant to state public policy, the Commission limited the MOPR's application only to natural gas-fired resources—*i.e.*, those that would most likely be used as part of an effort to decrease capacity market prices.[42]

17. How things have changed. Today, the Commission expressly admits that, for the first time, the MOPR is no longer about buyer-side market power.[43] Instead, as noted, it is all about and only about nullifying the effects of state public policies. That dramatic shift began only in 2018, more than a decade after the MOPR was first employed to mitigate the exercise of market power.[44] The intervening two years have been head-spinning as the Commission has rapidly transformed a narrowly tailored anti-monopsony measure into a regime for blocking state efforts to shape the generation mix.

18. At no point, however, has the Commission been able to coherently justify the MOPR's change of target. It first claimed that this transformation of the MOPR was necessary to ensure "investor confidence" and the ability of unsubsidized resources to compete against resources receiving state support.[45] A few months later, at the outset of this proceeding, the Commission abandoned "investor confidence" and asserted that the need to mitigate state policies in order to protect the "integrity" of the capacity market—another concept that it did not bother to explain.[46] And last December, the Commission

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[42] *See N.J. Bd. of Public Utils. v. FERC*, 744 F.3d 74, 106-07 (3d Cir. 2014) (*NJBPU*) (summarizing the Commission's reasoning for limiting the MOPR to only natural gas-fired resources). The Commission asserts, without explanation, that there is a "clear tension" between the 2011 order eliminating the public policy exemption to then-limited MOPR and recent state efforts to shape the generation mix. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 320. Nonsense. The 2011 order specifically exempted all non-natural-gas-fired resources from the MOPR, squarely foreclosing whatever tension the Commission pretends to uncover today. In any case, it is hardly fair to assign states the responsibility for predicting when the Commission will abandon its precedent and entirely reorient its approach to regulating a construct like the PJM capacity market.

[43] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 45 (stating that "the expanded MOPR does not focus on buyer-side market power mitigation").

[44] *See ISO New England Inc.*, 162 FERC ¶ 61,205, at PP 20-26 (2018). That order also came after every existing court case considering the legality of the Commission's use of the MOPR.

[45] *Id.* P 21.

[46] June 2018 Order, 163 FERC ¶ 61,236 at PP 150, 156, 161.

added yet another new twist: That state subsidies "reject the premise of the capacity market."[47] But, as with investor confidence and market integrity, it is hard to know exactly what that premise is. Today's orders provide more of the same, reiterating those buzz words without any further explanation.[48] If there is one thing that those inscrutable terms share, it is their inability to conceal, much less justify, the fundamental shift in the Commission's focus.[49] The Commission's effort to recast the MOPR as always having been about price suppression at some level of generality[50] obfuscates that point and badly mischaracterizes the recent shift in the MOPR's focus.

19. Neither of the Commission's responses provide it much cover. First, the Commission asserts that the new MOPR does not intrude on states' exclusive jurisdiction just because it "affect[s] matters within the states' jurisdiction."[51] Of course that is true; *EPSA* tells as much.[52] But it is also beside the point. My argument—and the arguments

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[47] December 2019 Order, 169 FERC ¶ 61,239 at P 17.

[48] *E.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 78 (asserting that "[t]he Commission may, as here, take action to protect the integrity of federally-regulated markets against state policies" without explaining what exactly integrity means in this context); *id.* P 320 (explaining that the various exemptions provided for in the December 2019 Order are for "resources that accept the premise of a competitive capacity market" (quoting December 2019 Order, 169 FERC ¶ 61,239 at P 17)); *id.* P 337 (asserting that "[t]he replacement rate directed in the December 2019 Order addresses State-Subsidized Resources, which pose a risk to the integrity of competition in the wholesale capacity market").

[49] Public Power Entities Rehearing Request at 6-7 ("The Commission did not justify the transformation of the MOPR from a limited mechanism aimed at preventing price suppression by subsidized new entry into a sweeping restriction on almost all forms of non-federal support for generation resources.").

[50] December 2019 Order, 169 FERC ¶ 61,239 at 136; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 338 ("[T]he December 2019 Order expands the scope of the MOPR, but not its underlying purpose."). As I noted in my underlying dissent, suggesting that the MOPR has always been about price suppression is the equivalent of saying that speed limits have always been about keeping people from getting to their destination too quickly. There is a sense in which that is true, but it kind of misses the point. December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at n.35).

[51] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 15-16.

[52] *EPSA*, 136 S. Ct. at 776 ("[A] FERC regulation does not run afoul of § 824(b)'s proscription just because it affects—even substantially—the quantity or terms of retail

made by several parties on rehearing[53]—is that the Commission is exercising its authority over wholesale sales to "aim at" or "target" matters subject to exclusive state jurisdiction. As explained above, the "goals" of the new MOPR and the mechanism "through which [it] operates" demonstrate an unmistakable focus on states' exercise of their reserved authority.[54] That means that, unlike the rule in *EPSA*, today's orders are not "all about, and only about, improving the wholesale market."[55] Accordingly, the Court's precedent regarding the incidental effects of a valid exercise of Commission authority are beside the point.

20. In addition, the Commission appears to suggest that it can overstep its jurisdictional bounds only if it *literally* requires states to build certain resources or prevents states from doing the same.[56] In other words, the Commission's theory of the case is that it exceeds its jurisdiction *only* if it directly regulates the construction of new resources. But that suggestion is inconsistent with the Supreme Court's recent cases, including *EPSA*, that make clear that the FPA does not permit federal or state regulators to use their authority in an attempt to interfere with the other's sphere of exclusive jurisdiction by aiming at or targeting the matters peculiarly within that sphere.[57] Accordingly, the Commission's reasoning is both a misapplication of the law and arbitrary and capricious insofar as it utterly misses the point of the argument made by several parties on rehearing.[58]

21. Second, the Commission points to a handful of court of appeals decisions upholding various Commission orders addressing capacity markets. None of those cases sanction the Commission's actions in this proceeding. The December 2019 Rehearing Order contends principally that the U.S. Court of Appeals for the Third Circuit's (Third

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sales.").

[53] *See, e.g.* Public Power Entities Rehearing Request at 13-15; Clean Energy Advocates Rehearing Request at 85-89.

[54] *EPSA* 136 S. Ct. at 776-77.

[55] *Id*. at 776.

[56] *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 17.

[57] *See supra* P 7; *EPSA* 136 S. Ct. at 776-77.

[58] *See, e.g.*, Public Power Entities Rehearing and Clarification Request at 13-16; Clean Energy Associations Rehearing and Clarification Request at 10-11; Maryland Commission Rehearing and Clarification Request at 9-13; *see also supra* P 7; December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at PP 7-17).

Circuit) decision in *NJPBU* inoculates the Commission against any charge that it has exceeded its jurisdiction by intruding on state authority over resource decisionmaking.[59] That is not how precedent works. Just because a court upheld one order against a particular challenge does not mean that it would uphold all similar orders against other challenges.

22. In any case, the orders in this proceeding bear only a surface-level similarity to *NJBPU*.[60] As the Third Circuit explained, the purpose of the MOPR on review in that case was limited to mitigating the exercise of buyer-side market power[61]—a concern that, as noted, lies at the core of the Commission's authority over wholesale rates and practices.[62] Consistent with that focus, that MOPR applied only to natural gas-fired power plants because they were the resources that a large net buyer of capacity could rationally use to suppress the capacity market clearing price.[63] In that case, the Commission eliminated an "exception" from the MOPR that had previously allowed state-sponsored natural gas-fired units to skirt the MOPR.[64] The Commission justified its decision by pointing to a pair of (ultimately preempted) state laws that subsidized new natural gas plants by effectively guaranteeing them a predetermined wholesale rate.[65]

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[59] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 16 ("The court's decision in *NJBPU* demonstrates that the findings from the December 2019 Order are within the Commission's jurisdiction."); June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 66.

[60] *See supra* PP 16-18 (discussing the MOPR's evolution).

[61] *NJBPU*, 744 F.3d at 84-85. In other words, the "aim" or "target" of the MOPR was limited to the exercise of wholesale market power. *Id.*

[62] *See supra* note 41.

[63] *NJBPU*, 744 F.3d at 106 ("[T]he only resources subject to the MOPR are natural gas-fired technologies."); *id.* ("FERC asserts that the characteristics of gas units make them more likely to be used as price suppression tools." (internal quotation marks omitted)).

[64] *Id.* at 79.

[65] *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61022, at P 139 (2011); *id.* PP 128-138 (discussing the evidence in the record). In *Hughes*, the Supreme Court subsequently held that the Maryland law, which was functionally identical to the New Jersey law, was preempted because it aimed at FERC's exclusive jurisdiction over wholesales. 136 S. Ct. at 1928. That the Commission's elimination of the state resource exemption was both focused exclusively on the exercise of buyer-side market power and in response to a

The court concluded that all the MOPR did in that case was ensure a "new resource is economical—*i.e.*, that it is needed by the market—and ensures that its sponsor cannot exercise *market power* by introducing a new resource into the auction at a price that does not reflect its costs and that has the effect of lowering the auction clearing price."[66] In addition, in reviewing those facts, the court observed that "FERC's enumerated reasons for approving the elimination of the state-mandated exception relate directly to the wholesale price for capacity."[67]

23. Today's orders are an altogether different animal. As noted above, the December 2019 Rehearing Order explicitly disavows the mitigation of market power as the basis for the new MOPR,[68] instead making it "all about and only about"[69] "nullifying"[70] state efforts to shape the generation mix[71]—or at least those state efforts that the Commission

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state's "intrusion" on FERC's exclusive jurisdiction, *id.* n.11, only underscores the differences between that decision and today's orders.

[66] *NJBPU*, 744 F.3d at 97 (emphasis added).

[67] *Id*.

[68] *See supra* P 7; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 45 ("[T]he expanded MOPR does not focus on buyer-side market power mitigation."); June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 56.

[69] *EPSA*, 136 S. Ct. at 776.

[70] As noted, this is the Commission's own term for describing the effect that applying the MOPR has on a particular policy. December 2019 Order, 169 FERC ¶ 61,239 at P 87. On rehearing, several parties identified the tension between the Commission's assertions that it could not apply the MOPR to federal policies because to do so would "nullify" those policies and its statements that applying the MOPR to state policies has no effect whatsoever. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 12. Although the Commission summarizes some of those arguments, it does not respond to them.

[71] *See supra* P 9 (explaining how the Commission's orders focus only on state efforts to regulate the generation mix and not on other state efforts that could conceivably have the same price suppressive effects). Even PJM, which brought this problem to our doorstep in 2018, criticizes the Commission for abandoning the MOPR's role as "guardrail" and turning it into an "over-broad and over-prescriptive" rule that "needlessly interferes with state resource policies." PJM Rehearing and Clarification Request at 6-9.

dislikes.[72] As explained above, today's orders—and, indeed, every order in this proceeding—has made clear that the aim of the new MOPR is to "deter" states from taking actions of which the Commission disapproves.[73] That makes today's orders a far cry from *NJBPU.* In addition, the new MOPR mitigates indiscriminately and explicitly does not require that the mitigated state policy actually affect the capacity market clearing price or even be likely to have such an effect.[74] That is distinctly unlike the targeted MOPR in *NJBPU* that addressed only the resources most likely to be used in an exercise of market power.[75] Simply put, the MOPR addressed in today's orders is so fundamentally different from that before the court in *NJBPU* as to render the holding in that case next to meaningless as applied to these orders.

24. The Commission also suggests that the D.C. Circuit's decisions in *Connecticut Department* and *Municipalities of Groton* support today's outcome.[76] But those cases have even less in common with the facts before us than *NJBPU.* In both instances, the court upheld the Commission's authority to require wholesale buyers to purchase particular quantities of capacity.[77] As the Court explained in *Connecticut Department*, the Commission's focus was squarely on market structures that would motivate utilities to develop or acquire the necessary capacity.[78] But the Court went out of its way to explain that nothing in the Commission's orders in any way limited the states' ability to *influence* or, indeed, directly select the resources that would meet those capacity

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[72] *See supra* PP 11-12; *infra* Section II.B.1.d.

[73] *See supra* P 14.

[74] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 132.

[75] Public Power Entities Rehearing Request at 15 (The "expansion of the MOPR fundamentally alters its purposes and impact in a way that impermissibly intrudes on state authority.").

[76] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 15 & n.45 (citing *Conn. Dep't of Pub. Util. Control v. FERC*, 569 F.3d 477, 481-82 (D.C. Cir. 2009) and *Muns. of Groton v. FERC*, 587 F.2d 1296, 1301 (D.C. Cir. 1978)).

[77] *Connecticut Dep't*, 569 F.3d 481-85; *id.* at 482 (explaining that *Municipalities of Groton* "sustained the Commission's jurisdiction to review the 'deficiency charges' . . . charged . . . when member utilities failed to live up to their share of NEPOOL's reliability requirement").

[78] *Id.* at 482.

requirements.[79] And that is where any superficial similarity to today's orders ends. As noted, the new MOPR is expressly about limiting—"nullify[ing]" to use the Commission's word[80]—state efforts to shape the resources that meet those requirements.[81] What is more, that nullification is the express reason for of the Commission's action: The orders' goal is to block the effects of state policies and deter states from exercising their authority over generation facilities.[82]

25. Finally, it is important to be precise about my jurisdictional argument. I do not believe that any MOPR is *per se* invalid just because it complicates state efforts to regulate generation facilities.[83] After all, *NJBPU* indicates that the use of a MOPR that addresses matters squarely within the Commission's authority is permissible, at least in certain circumstances.[84] But that is not what we have here. As explained above, today's orders confirm that the Commission is deploying its new MOPR to aim at state resource decisionmaking and for the purpose of substituting its own policy preferences for those of the states. That "fatal defect" renders this particular MOPR in excess of the Commission's jurisdiction.[85]

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[79] *Id.*

[80] December 2019 Order, 169 FERC ¶ 61,239 at PP 10, 89.

[81] *See supra* P 10.

[82] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 319. The Commission is also fond of pointing to the U.S. Court of Appeals for the Seventh Circuit's statement, in resolving preemption litigation regarding Illinois's zero-emissions credits, that the Commission has the authority to make "adjustments" to its regulations in light of state action. *Star*, 904 F.3d at 524. And indeed it does. But it does not follow that the Commission can make *any* "adjustment" that it wants, certainly not one inconsistent with Supreme Court's holdings on the limit of federal authority under the FPA.

[83] As I have elsewhere explained, the proper role for MOPRs is in combatting exercises of market power, not state efforts to shape the generation mix. *N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (2020) (Glick, Comm'r, dissenting at PP 15-16).

[84] *NJBPU*, 744 F.3d at 96-98.

[85] *Cf. Hughes*, 136 S. Ct. at 1299.

## II. The Commission's Orders Are Arbitrary and Capricious

26. Today's orders are also arbitrary and capricious. The upshot of the majority's position is that PJM's capacity market is a just and reasonable construct *only* if the Commission "nullifies" the effects of state public policies. That interpretation of the FPA is as radical as it is wrong and finds no support in the 80-year history of the Act or in any Commission or court precedent.[86] I suppose it should be no surprise that installing such an unprecedented mitigation regime proves to be a difficult task. But that is no excuse for an order riddled with determinations that are unsupported by the record and deeply arbitrary and capricious. The whole purpose of the Administrative Procedure Act is to prevent an agency from relying on fundamentally flawed reasoning in order to impose its policy preferences. If ever those protections were needed to address an action of the Commission, it is this one, both because of the shoddy reasoning on which the Commission's actions are based and the tremendous damage they may ultimately do. In the following sections, I detail several of what I view to be the most serious flaws in the Commissions reasoning, any of which should be sufficient to invalidate today's orders.

### A. The Commission Has Not Shown that the Existing Rate Was Unjust and Unreasonable

27. Section 206 of the FPA requires the Commission to show that the existing rate is unjust and unreasonable or unduly discriminatory or preferential before it can set a replacement rate.[87] The June 2018 Rehearing Order fails to articulate a reasoned basis for concluding that the pre-existing capacity market rules were unjust and unreasonable or unduly discriminatory or preferential. Instead, the Commission doubles down on a

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[86] The December 2019 Order also swept beyond what was contemplated in the original *Calpine* complaint by suggesting that voluntary commercial transactions involving renewable energy credits (RECs) would constitute a state-subsidized transaction and be subject to the MOPR. In response, several parties sought late intervention, which the Commission denies. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 4. I would have granted those interventions. The December 2019 Order took an approach to mitigation that was far broader than any that had been contemplated to date in this proceeding and, indeed, in the Commission's history. Under those circumstances, we would be better served by letting would-be parties have their full say, rather than forcing them to sit on the sidelines.

[87] *Emera Maine v. FERC*, 854 F.3d 9, 25 (D.C. Cir. 2017) ("[A] finding that an existing rate is unjust and unreasonable is the 'condition precedent' to FERC's exercise of its section 206 authority to change that rate." (quoting *FPC v. Sierra Pac. Power Co.*, 350 U.S. 348, 353 (1956))).

conclusory theory of the case that does not seriously wrestle with the contrary arguments and evidence in the record.

28. The June 2018 Rehearing Order does not rely on any evidence that state policies are actually distorting prices, much less that they are doing so in a way that imperils resource adequacy in the region. Instead, the Commission's case rests on two propositions: (1) that certain state subsidies permit resources to lower their capacity market offers, which, if enough resources do it, will lower the clearing price[88] and (2) that the number of potentially subsidized megawatts in PJM appears likely to grow in coming years.[89] That is the entirety of the Commission's theory. And that is not enough, on this record, to reasonably conclude that PJM's existing tariff was unjust and unreasonable or unduly discriminatory or preferential.

29. As numerous parties argued on rehearing, the idea that resource adequacy in PJM is currently imperiled by state subsidies is, frankly, laughable. The Base Residual Auction has consistently procured more resources than required to meet PJM's reliability requirement and thousands of megawatts of additional resources have elected not to retire, even though they are not receiving any capacity market payment.[90] If state policies are, in fact, a threat to resource adequacy, there is certainly no evidence of that in PJM's current reserve margins. Instead, as discussed in some detail in another statement I am issuing today, if there is a problem in PJM's capacity market, it is not that prices are too low, but rather that the market is designed to produce prices that are too high, over-procuring capacity and dulling the price signals in the energy and ancillary service

[88] *E.g.*, June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 28 ("It is axiomatic that resources receiving out-of-market subsidies need less revenue from the market than they otherwise would. The rational choice for such resources, given their need to participate in PJM's capacity market, is to reduce their offers commensurably to ensure they clear in the market.").

[89] *E.g.*, *id.* P 29 ("Rather, the June 2018 Order emphasized the significant and continued growth of out-of-market support. As this growth continues, more subsidized resources will have the ability to offer below their costs and suppress prices" (footnotes omitted)).

[90] *See, e.g.*, Joint Consumer Advocates June 2018 Order Rehearing Request at 8 (citing PJM 2021/2022 RPM Base Residual Action Results at 1, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx (2021/2022 BRA Summary)); *see also* 2021/2022 BRA Summary ("The 2021/2022 Reliability Pricing Model (RPM) Base Residual Auction (BRA) cleared 163,627.3 MW of unforced capacity in the RTO *representing a 22.0% reserve margin*." (emphasis added)).

markets.[91] Faced with that fact, the Commission responds with the assertion that state subsidies will surely cause a problem in the future.[92] Maybe, but there is no evidence in this record that suggests that state policies will cause any resource adequacy concerns whatsoever.

30. Apparently recognizing that point, the Commission pivots to economic theory as the basis for its action.[93] It is true that the Commission need not prove *basic* economic principles every time that it seeks to act on them. After all, "[a]gencies do not need to conduct experiments in order to rely on the prediction that an unsupported stone will fall."[94] Instead, agencies can rely on economic theory to make predictive judgments about how the future will play out.[95] But that does not mean that an agency can turn "economic theory" into a "talismanic phrase that does not advance reasoned decision making" and claim to have satisfied its obligations under the APA.[96] In other words, an agency cannot articulate a principle, label it "economic," make a prediction, and move on without wrestling with contrary record evidence or reasonable alternative applications of that economic theory.

31. But that is exactly what the June 2018 Rehearing Order does. It asserts that state subsidies in PJM are increasing, that subsidies reduce the costs of the resource being subsidized and, therefore, subsidies will cause more subsidized resources to clear the capacity market. All true. From that though, the Commission concludes that PJM's tariff will no longer ensure resource adequacy at rates that are just and reasonable and not

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[91] *See PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,040 (2020) (Glick, Comm'r. dissenting).

[92] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 29-30.

[93] *E.g.*, *id.* PP 25, 27, 29, 34, 37.

[94] *Assoc. Gas Distributors v. FERC*, 824 F.2d 981, 1008 (D.C. Cir. 1987). I cannot help but note the mild irony that the rest of that example of an assumable economic theory is that "competition will normally lead to lower prices," *id.* at 29, while the Commission's theory of the case today rests on the supposedly urgent need to raise prices.

[95] *See, e.g.*, *NextEra Energy Res., LLC v. FERC*, 898 F.3d 14, 23 (D.C. Cir. 2018); *S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41, 65, 76 (D.C. Cir. 2014) ("[A]t least in circumstances where it would be difficult or even impossible to marshal empirical evidence, the Commission is free to act based on reasonable predictions rooted in basic economic principles.").

[96] *TransCanada Power Mktg. Ltd. v. FERC*, 811 F.3d 1, 13 (D.C. Cir. 2015).

unduly discriminatory or preferential, which is where its reasoning gets a little tenuous, as the economic principle articulated does not lead ineluctably to the regulatory conclusion reached. Instead, the record is replete with evidence and reasonable theories that could support an alternative conclusion. For one thing, the evidence in the record of continued high prices and entry of new resources (not to mention, retention of old ones) could just as easily support the conclusion that a more-than-adequate quantity of resources will remain in the market, state subsidies notwithstanding.[97] As numerous parties point out, that has been the experience to date in PJM.[98] Why the Commission is so confident that things will change at some undefined future inflection point is never explained. Nor does the Commission explain why it is confident that those assumed effects justify an increase in customer's rates.

32. In addition, it is equally reasonable to suggest that the natural effect of state subsidies (indeed, in many cases, their intended result) will be to bring online large amounts of new resources that will themselves help to ensure resource adequacy.[99] Nothing in today's orders explains why the Commission is so confident that the deployment of state-sponsored resources will impair PJM's ability to ensure resource adequacy at just and reasonable rates rather than enhancing it. After all, it is worth remembering that, as discussed above, the FPA expressly reserved the regulation of generation facilities to the states and Congress presumably expected the states to wield that reserved authority.[100] Why the exercise of that authority is inherently unjust and unreasonable or a "problem" in need of "solving" is never clearly explained. Repeated

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[97] Today's orders contain several variations on the notion that "adequate reserve margins today do not necessarily mean that such conditions will continue into the future." June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 35. Sure. But the burden of proof is on the Commission to show that the current tariff is unjust and unreasonable, not on proponents of the status quo to show that the tariff will necessarily remain just and reasonable in perpetuity. *See Emera Maine*, 854 F.3d at 24 ("'The proponent of a rate change under section 206, however, bears "the burden of proving that the existing rate is unlawful.'" (quoting *Ala. Power Co. v. FERC*, 993 F.2d 1557, 1571 (D.C. Cir. 1993)).

[98] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at PP 16-17.

[99] It is certainly possible that the entry of those resources will lower the capacity market clearing price, which should not necessarily be a bad result in the eyes of an agency whose "primary purpose" is to protect customers. *See, e.g.*, *City of Chicago, Ill. v. FPC*, 458 F.2d 731, 751 (D.C. Cir. 1971) ("[T]he primary purpose of the Natural Gas Act is to protect consumers." (citing, *inter alia*, *City of Detroit v. FPC*, 230 F.2d 810, 815 (1955)).

[100] *See supra* P 5.

incantations of the phrase "economic theory" does not provide a reasoned answer to the question.

33. The closest the Commission comes to explaining its confidence in a looming future problem is its series of elliptical statements about investor confidence and the merchant business model. Throughout this proceeding, the Commission has relied on various inscrutable principles, such as "investor confidence" or "market integrity," to justify its new MOPR.[101] At various points in the June 2018 Order, and again today, the Commission expressed concern about the challenges state policymaking may create for investors in particular resources in the capacity market[102] and the June 2018 Rehearing Order specifically raises the concern that state policies may harm unsubsidized generators.[103] These statements seem to suggest that the problem with the state policies is that they may reduce the profit margins of unsubsidized resources and make it correspondingly less likely investors will pour their money into those resources, which the Commission assumes will impair resource adequacy.

34. I recognize and appreciate the large influx of capital that investors and the merchant business model, more generally, have brought to PJM over the last two decades. Those investments have enhanced the grid's reliability while helping to decrease its carbon intensity—both good outcomes. But it is not our responsibility to protect particular businesses, business models, or their investors from state regulation. If states choose to address a market failure by promoting particular resource types or business models over others, it is not for the Commission to give a leg up to business models that might lose out as a result. In any case, PJM's generation resource mix has long reflected a mix of vertically integrated utilities and merchant generators, both of which have benefited from public policies. The June 2018 Rehearing Order does not adequately explain the Commission's apparent confidence that that cannot continue in a future in which states continue to exercise their authority under FPA section 201(b).

35. The Commission also makes the assertion that state policies are a problem because they create "significant uncertainty" and "investors cannot predict whether their capital will be competing" against subsidized resources.[104] As I explained in my dissent from

[101] *Supra* P 18.

[102] *E.g.*, June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 35 ("[I]nvestors may be hesitant to invest in a market where both new entry and the viability of uneconomic existing resources is dictated largely by state subsidy programs."); June 2018 Order, 163 FERC ¶ 61,236 at P 150 (similar).

[103] June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 28 (noting the potential that state policies will "injure[] non-subsidized competitors").

[104] June 2018 Order, 163 FERC ¶ 61,236 at P 150.

the June 2018 Order, uncertainty about regulation will always be endemic in a regulated industry.[105] And nothing in the June 2018 Order or the June 2018 Rehearing Order explains why the purported uncertainty caused by state policymaking is more problematic than the other forms of uncertainty that pervade the industry.

36. The bottom line is that neither the June 2018 Order nor today's order on rehearing has adequately explained why the existing tariff is unjust and unreasonable or unduly discriminatory or preferential. The sum total of the Commission's analysis is that the PJM states will likely, in the future, subsidize more generating resources and that, all else equal, those subsidies will cause those resources to offer into the capacity market at lower prices than they would otherwise. But that alone does not prove the existing tariff is unjust and unreasonable, especially given the long history of state policies affecting the capacity market and the equally plausible future scenarios in which the capacity market continues to ensure resource adequacy at just and reasonable rates while state-sponsored resources co-exist with other business models. After all, to carry its burden under section 206, the Commission must do more than articulate a theory, label it "economics," and call it a day.

### B. The Commission Has Not Shown that Its Replacement Rate Is Just and Reasonable

37. If the Commission meets its burden to show that the existing rate is unjust and unreasonable or unduly discriminatory or preferential, then the burden is again on the Commission to establish a "replacement rate" that is itself just and unreasonable and not unduly discriminatory or preferential.[106] The December 2019 Rehearing Order fails to articulate a reasoned basis for concluding that the new MOPR meets that burden. Instead, like the June 2018 Rehearing Order, it doubles down on a conclusory statements that do not seriously wrestle with the contrary arguments and evidence in the record.

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[105] *Id.* (Glick, Comm'r, dissenting at 11)

[106] *Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656, 663 (D.C. Cir. 2017) ("When the Commission changes an existing filed rate under section 206, it is 'the Commission's burden to prove the reasonableness of its change in methodology.'" (quoting *PPL Wallingford Energy L.L.C. v. FERC*, 419 F.3d 1194, 1199 (D.C. Cir. 2005))); *see also Emera Maine*, 854 F.3d at 27 ("'Although it is not our role to tell the Commission what the correct rate of return calculation is . . . we do have an obligation to remand when the Commission's conclusions are contrary to substantial evidence or not the product of reasoned decisionmaking.'" (quoting *Pub. Serv. Comm'n of N.Y. v. FERC*, 813 F.2d 448, 465 (D.C. Cir. 1987))).

### 1. The Commission's Definition of State Subsidy Is Arbitrary and Capricious

38. The crux of the December 2019 Order, and today's order on rehearing, is the Commission's definition of subsidy. That definition, however, is also the source of many of the Commission's most arbitrary and capricious determinations. Simply put, it is little more than a series of arbitrary lines that do not comport with the Commission's explanation for why the existing tariff was unjust and unreasonable or why the new MOPR will produce a just and reasonable rate.

#### a. Excluding Federal Subsides Is Arbitrary and Capricious

39. No single determination is in today's orders is more arbitrary than the Commission's exclusion of all federal subsidies from the new MOPR.[107] Federal subsidies have pervaded the energy sector for more than a century, beginning even before Congress, in the FPA, declared that the "business of transmitting and selling electric energy . . . is affected with a public interest."[108] Since 1916, federal taxpayers have supported domestic exploration, drilling, and production activities for our nation's fossil fuel industry.[109] And since 1950, the federal government has provided roughly a trillion dollars in energy subsidies, of which 65 percent has gone to fossil fuel technologies.[110] Those federal policies present all the same "problems" that the Commission identifies

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[107] December 2019 Order, 169 FERC ¶ 61,239 at P 89; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 118-120.

[108] 16 U.S.C. § 824.

[109] *See* Molly Sherlock, Cong. Research Serv., *Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures* 2-3 (May 2011), *available at* https://fas.org/sgp/crs/misc/R41227.pdf (Energy Tax Policy).

[110] *See* Nancy Pfund and Ben Healey, DBL Investors, *What Would Jefferson Do? The Historical Role of Federal Subsidies in Shaping America's Energy Future*, (Sept. 2011), *available at* http://www.dblpartners.vc/wp-content/uploads/2012/09/What-Would-Jefferson-Do-2.4.pdf; *New analysis: Wind energy less than 3 percent of all federal incentives*, Into the Wind: The AWEA Blog (July 19, 2016), https://www.aweablog.org/14419-2/ (citing, *inter alia*, Molly F. Sherlock and Jeffrey M. Stupak, *Energy Tax Incentives: Measuring Value Across Different Types of Energy Resources*, Cong. Research Serv. (Mar. 19, 2015), *available at* https://fas.org/sgp/crs/misc/R41953.pdf; The Joint Committee on Taxation, *Publications on Tax Expenditures*, https://www.jct.gov/publications.html?func=select&id=5 (last visited Apr. 16, 2020)) (extending the DBL analysis through 2016).

with state policies. They have "artificially" reduced the price of natural gas, oil, and coal, which in turn has allowed resources that burn these fuels—including many of the so-called "competitive" resources that stand to benefit from today's orders—to submit "uncompetitive" bids into PJM's markets. By lowering the marginal cost of fossil fuel-fired units, federal policies have allowed those units to operate more frequently and have encouraged the development of more of those units than would otherwise have been built. Indeed, those subsidies, even ones that have subsequently lapsed, are a major reason why many of the current resources in PJM are able to bid into the capacity market at the levels they do.

40. Federal subsidies remain pervasive in PJM. The federal tax credit for nonconventional natural gas[111] sparked the shale gas revolution, triggering a steep decline in natural gas prices, which, in turn, drove the spike in new natural gas-fired power plants starting in the early 2000s. Similarly, federal subsidies such as the percentage depletion allowance and the ability to expense intangible drilling costs have shaved billions of dollars off the cost of extracting coal and natural gas—two of the principal sources of electricity in PJM.[112] In addition, the domestic nuclear power industry would not exist without the Price-Anderson Act, which saves nuclear power generators billions of dollars through indemnity limits that enable them to secure financing and insurance at rates far below their true cost.[113] Federal subsidies have also promoted the growth of renewable resources through, for example, the production tax credit (largely used by wind resources)[114] and the investment tax credit (largely used by solar resources).[115] These and

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[111] Energy Tax Policy at 2 n.3. That credit has lapsed. *Id.* at 18.

[112] The Joint Committee on Taxation, Estimates Of Federal Tax Expenditures For Fiscal Years 2018-2022 at 21-22 (2018); Monitoring Analytics, *Analysis of the 2021/2022 RPM Base Residual Auction: Revised* 95 (2018), *available at* https://www.monitoringanalytics.com/ reports/Reports/2018/ IMM_Analysis_ of_the_20212022_RPM_BRA_Revised _20180824.pdf (Market Monitor 2021/2022 BRA Analysis) (reporting that coal, natural gas, and nuclear collectively make up more than three-quarters of the generation mix in PJM); *see generally* Molly Sherlock, Cong. Research Serv., Energy Tax Policy: Historical Perspectives on and Current Status of Energy Tax Expenditures 2-6 (May 2011) (discussing the history of energy tax policy in the United States).

[113] 42 U.S.C. § 2210(c).

[114] U.S. Department of Energy, 2018 Wind Technologies Market Report 70, *available at* http://eta-publications.lbl.gov/sites/default/files/ wtmr_final_for_posting_8-9-19.pdf (last viewed Apr. 16, 2020).

[115] Solar Energy Industries Assoc., *History of the 30% Solar Investment Tax*

other federal government interventions have had a far greater "suppressive" impact on the capacity market than the "state subsidies" targeted by today's orders, especially when you consider that resources having benefited from them make up the vast majority of the cleared capacity in PJM.[116]

41. Nevertheless, today's order affirms the December 2019 Order's decision to exclude all federal subsidies from the new MOPR on the theory that the Commission lacks the authority to "disregard or nullify the effect of federal legislation."[117] It is true that the FPA does not give the Commission the authority to undo other federal legislation. But the Commission's defense of applying the new MOPR to state policies is that it neither disregards nor nullifies those policies, but instead addresses only the effects that those policies have on the PJM market.[118]

42. "[T]he Commission cannot have it both ways."[119] If the MOPR disregards or nullifies federal policy, then it must do the same to state policy. And if it does not nullify or disregard state policy, then the Commission's justification for exempting federal subsidies collapses. The Commission, however, does not even attempt to explain its conclusion that applying the new MOPR to state policies respects authority, but applying

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*Credit* 3-4 (2012), https://www.seia.org/sites/default/files/resources/History%20of%20ITC%20Slides.pdf.

[116] Market Monitor 2021/2022 BRA Analysis 95 (reporting that coal, natural gas, and nuclear collectively make up more than three-quarters of the generation mix in PJM).

[117] December 2019 Order, 169 FERC ¶ 61,239 at P 87; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 119.

[118] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 16, 17, 19; December 2019 Order, 169 FERC ¶ 61,239 at PP 7, 40; June 2018 Order, 163 FERC ¶ 61,236 at P 153. The December 2019 Rehearing Order shies away from the words "nullify" and "disregard" that it used (quite accurately) in the underlying order. I can understand why. Those terms so clearly laid bare the glaring inconsistencies in the Commission's effort to explain why the MOPR did not target state authority, but could not legally be applied to federal subsidies. Nevertheless, the rationale in today's order is the same: The new MOPR cannot be applied to federal subsidies because doing so would somehow contravene an act of Congress, which is precisely the result that the Commission insists it would not have on state policies.

[119] *Atlanta Gas Light Co. v. FERC*, 756 F.2d 191, 198 (D.C. Cir. 1985); *Cal. ex rel. Harris v. FERC*, 784 F.3d 1267, 1274 (9th Cir. 2015) (same).

it to federal policies would "disregard" or "nullify" federal authority. The failure to address, much less resolve, that tension is arbitrary and capricious.

43. Instead of confronting this tension, the December 2019 Order cited to a number of cases for well-established canons of statutory interpretation, such as that the general cannot control the specific and that federal statutes must, when possible, be read harmoniously.[120] Today's order does the same.[121] But those general canons do not help much. They discuss rules of statutory interpretation that are not disputed here and they certainly do not give the Commission license to pretend that the new MOPR has one type of effect on state policies and another type on federal policies.[122] In any case, if we assume, for the sake of argument, that the Commission's benign characterization of the effect of the new MOPR on state policies is accurate,[123] then no number of interpretive canons can cure the Commission's arbitrary refusal to apply the MOPR to federal subsidies.

44. In addition, the Commission asserts that it may treat state and federal subsidies differently because it "has a reasonable basis to distinguish federal subsidies and State Subsidies, that is, whether the subsidies were established via federal law or state law."[124] But that tautology is not as helpful as it might at first seem. Just as not all discrimination is undue, irrelevant differences do not make parties dissimilarly situated.[125] Today's

[120] December 2019 Order, 169 FERC ¶ 61,239 at n.177.

[121] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 120.

[122] Today, the Commission tries a slightly different tack, responding to rehearing requests raising this very point with the assertion that the cited canons "reflect judicial guidance regarding the appropriate way to reconcile Congressional directives." December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 120. No doubt they do, but all the interpretive canons in the world cannot explain why it is rational to pretend that applying the MOPR to a federal subsidy has an inherently different effect than applying it to a state subsidy.

[123] To be clear, I vehemently disagree that is, but I'll indulge the hypothetical for the moment.

[124] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 119.

[125] *Complex Consol. Edison Co. of N.Y. v. FERC*, 165 F.3d 992, 1013 (D.C. Cir. 1999) ("'Differences . . . based on *relevant, significant* facts which are explained are not contrary to the NGA.'" (quoting *TransCanada Pipelines Ltd. v. FERC,* 878 F.2d 401, 413 (D.C. Cir. 1989)) (emphasis added)).

order does not coherently explain why the difference between federal and state subsidies is relevant to its theory of the case.

45. The Commission's apparent belief—implicit today, but stated explicitly in the December 2019 order—is that resources that receive federal subsidies are not similarly situated to resources that receive state subsidies because the Commission cannot nullify or disregard federal policies, but can do that to state subsidies.[126] Putting aside whether that is true,[127] that line of reasoning just brings us back to square one as it relies on an unexplained distinction in the differing effects that the MOPR has on state and federal policies.

**b. Treating Any Revenue or Other Funding Tangentially Related to a State Law As a Subsidy Is Arbitrary and Capricious**

46. As discussed at the outset, the FPA divides jurisdiction between the Commission and the states, envisioning an important role for both in ensuring that the electricity sector is regulated in a manner consistent with the public interest. As the Commission explains, Congress enacted Title II of the FPA to fill the "*Attleboro* Gap" by "allow[ing] the federal government to step in and regulate interstate transactions over which no single state had authority to regulate."[128] And while the FPA did more than just "fill the gap,"[129] it was nevertheless "'drawn with meticulous regard for the continued exercise of state power.'"[130] It would be strange if, having so "meticulous[ly]" preserved state authority, Congress believed that the "continued exercise of" that authority would become inherently a problem.[131]

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[126] December 2019 Order, 169 FERC ¶ 61,239 at P 89; December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 118-119 & n.298.

[127] *See supra* Section I.

[128] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at n.298.

[129] *New York v. FERC*, 535 U.S. 1, 6 (2002) ("[W]hen it enacted the FPA in 1935, Congress authorized federal regulation of electricity in areas beyond the reach of state power, such as the gap identified in *Attleboro*, but it also extended federal coverage to some areas that previously had been state regulated." (footnotes omitted)).

[130] *Zibelman*, 906 F.3d at 50 (quoting *Rochester Gas & Elec. Corp. v. Pub. Serv. Comm'n of N.Y.*, 754 F.2d 99, 104 (2d Cir. 1985)).

[131] *See supra* note 10 and accompanying text.

47. And yet that is precisely what the December 2019 Rehearing Order does. It treats many fundamental elements of state regulation as impermissible subsidies simply because the state is involved. Even putting aside the jurisdictional problems with that approach,[132] today's order does not explain why it is just and reasonable to mitigate any resource that is affected by many of the most foreseeable consequences of the FPA's jurisdictional framework. Nor does it make any effort to consider the litany of practical challenges and complications that that approach creates, even though many of them were squarely presented on rehearing.

48. Take the example of state default service auctions. As PJM explained in its rehearing request, state default service auctions are state-directed "mechanisms by which load-serving entities in retail choice states acquire obligations to provide energy and related services to retail customers."[133] In layman's terms, that means that they are a market-based mechanism for ensuring that all retail customers have access to reliable and affordable electricity. As the New Jersey Board of Public Utilities—which oversees one of these auctions—explained, these mechanisms are best viewed as hedging constructs that help ensure that state-regulated retail suppliers have access to reliable electricity without wild swings in price.[134] In New Jersey's case, the default service auction is a voluntary mechanism that will rarely, if ever, produce a state-regulated contract with an actual generator (as opposed to a power marketer—*i.e.*, a middle man) or support the retention or new entry of particular resources[135]—details that are apparently too complicated or too inconvenient for the Commission to wrestle with. Today's order finds that a state default service auction qualifies as a State Subsidy because it is a state sponsored process that results in indirect payments to various resources.[136]

49. It is not clear from the record before us exactly how far reaching this decision will be. New Jersey alone serves over 7,000 MW of retail load through its BGS auctions,[137] and every indication is that other retail-choice states have similar mechanisms.[138] To

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[132] *See supra* Section I.

[133] PJM Rehearing and Clarification Request at 23.

[134] New Jersey Board Rehearing Request at 47-48.

[135] *Id.* at 48.

[136] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 386.

[137] *See The 2019 BGS Auctions*, www.bgs-auction.com http://www.bgs-auction.com/documents/ 2019_BGS_Auction_Results.pdf (last viewed Apr. 16, 2020).

[138] *See, e.g.*, New Jersey Board Rehearing Request at n.260 ("New Jersey is not

start with, the District of Columbia Public Utility Commission and Pennsylvania Public Utility Commission sought clarification and rehearing of the December 2019 Order, understandably concerned that it could mean that *any* resource that serves load in those states would be subject to the Commission's administrative pricing regime.[139] In addition, Maryland runs a similar default service auction that procures service for over 50 percent of the state's retail load.[140] Delaware too has a default service auction, which cleared over 500 MW in the most recent auction.[141] Additionally in Ohio each utility has its own Standard Service Offer auction for retail load.[142] It quickly becomes clear that state default auctions are a commonplace in retail choice states and can often be used to meet the needs of upwards of 50% of retail load. The Commission's decision to label these auctions—which sometimes cover more than half a state's retail load—state subsidies could have sweeping consequences for the retail-choice states that make up the majority of PJM states.

50. And is if that were not bad enough, the Commission makes no effort to wrestle with the practical challenges of its edicts. As the New Jersey Board explained in its rehearing request, the "suppliers" in New Jersey's default service auction are generally power marketers that rely on either financial or physical hedging and are not necessarily

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alone; PJM's other restructured states follow models similar to the BGS construct.").

[139] DC Commission Rehearing and Clarification Request at 1-3; Pennsylvania Commission Rehearing and Clarification Request at 13. As noted, PJM also sought clarification, arguing that "it is not apparent how these auctions amount to a State Subsidy." PJM Rehearing and Clarification Request at 23.

[140] See Maryland Public Service Commission, Report to the Governor and the Maryland General Assembly on the Status of Standard Offer Service, the Development of Competition, and the Transition of Standard Offer Service to a Default Service at 5-6 (Dec. 31, 2018), *available at* https://www.psc.state.md.us/wp-content/uploads/Final-Competition-Report.pdf (discussing Maryland's default service auction).

[141] *See* James Letzelter, The Liberty Consulting Group, Inc., Delmarva Power & Light's 2020 Request for Proposals for Full Requirements Wholesale Electric Supply for Standard Offer Service (2020), *available at* https://depsc.delaware.gov/wp-content/uploads/sites/54/2020/02/Liberty-DE-PSC-Technical-Consultant-Final-Report-02-19-2020.pdf.

[142] *See How are electric generation rates set?* https://www.puco.ohio.gov/be-informed/consumer-topics/how-are-electric-generation-rates-set/ (last viewed Apr. 16, 2020).

backed by particular physical generators.[143] Do the Commission's statements in today's orders mean that PJM, the Market Monitor, or someone else will have to chase down every resource power marketers use to satisfy a default service auction contract? In addition, default service auctions generally do not align with PJM's annual single-delivery-year capacity auctions. For example, in New Jersey the auction runs annually and covers only one-third of load at time, but with three year contracts.[144] In the District of Columbia the auctions are held annually.[145] And in Pennsylvania they are run "quarterly, or every 6 months."[146] How will PJM, the Market Monitor, or the Commission sort out which resources are to be mitigated in PJM's Base Residual Auction based on those differing state calendars?

51. I find the failure to carefully consider these impacts on a fundamental aspect of state regulation particularly troubling. This Commission has rightly enjoyed a reputation for focusing on the technical and arcane elements of providing reliable electricity at just and reasonable rates rather than on making broad policy pronouncements. Today's orders will do much to damage that reputation. It makes clear that the Commission is uninterested in the effects its orders may have on how states carry out their basic responsibilities. Instead, it is comfortable pursuing its quixotic quest to rid the wholesale market of state subsidies and leave it to the states to pick up the pieces.

#### c. Excluding State Actions That May Equally "Suppress" Prices Is Arbitrary and Capricious

52. Although the definition of state subsidy is overbroad, it is also irrational. Today's order on rehearing affirms the December 2019 Order's unreasoned distinctions drawn among different state public policies. In particular, the Commission expressly excludes state industrial development policies and local siting subsidies from its definition of state subsidy.[147] The rationale, while murky, seems to be that those policies are "too attenuated" from the wholesale rate to constitute an impermissible state policy while

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[143] New Jersey Board Rehearing Request at 48; *see* Pennsylvania Commission Rehearing and Clarification Request at 13.

[144] *See Overview* http://www.bgs-auction.com/ bgs.auction.overview.asp (last visited Apr. 16, 2020) (describing New Jersey's default service auction).

[145] DC Commission Rehearing and Clarification Request at 2.

[146] Pennsylvania Commission Rehearing and Clarification Request at 13.

[147] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106.

other state policies, even ones with a lesser effect on the wholesale rate, are somehow more closely related.[148] That distinction is neither reasonable nor reasonably explained.

53. Let's begin with the fact that the distinction drawn is inconsistent with the Commission's rationale for the new MOPR. As discussed, throughout this proceeding the Commission has asserted that the problem with state policies is their ability to "suppress" the wholesale rate.[149] And, in the December 2019 Rehearing Order, the Commission again dismisses arguments that the MOPR should apply only to state policies that materially affect the capacity price.[150]

54. That is irrational. "General industrial development" policies, such as reduced tax rates, can have an enormous effects on resources' going forward costs, leading resources to "reduce their offers commensurately to ensure they clear the market," exactly the way the Commission described state policies that are subject to the new MOPR.[151] Moreover, the ubiquity and potential cumulative effect of these programs—which the Commission does not contest[152]—would seem to suggest that they represent exactly the sort of threat to "market integrity" about which the Commission's purports to be so concerned.[153] If

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[148] *Id.*

[149] *E.g. id.* PP 36, 55, 224.

[150] *Id.* P 130.

[151] *See id.* P 38; *see also id.* P 130 (rejecting PJM's proposed materiality threshold because "out-of-market support at any level is capable of distorting capacity prices").

[152] At no point in today's order or the December 2019 Order does the Commission suggest that state industrial development or siting support programs are likely to have less of an effect on wholesale rates than the other state policies targeted by the new MOPR. *See, e.g., id.* PP 106-108 (discussing the justification for excluding these policies from the new MOPR).

[153] *Id.* PP 20, 301. In any case, the District of Columbia Attorney General's rehearing request details how these programs can provide enormous financial benefits to generators, significantly decreasing their capacity market offers in a way that affects the capacity market rate every bit as much as the state policies targeted by today's orders. DC Attorney General Rehearing Request at 22-24. In addition, that rehearing request explained how these supposed "generic" subsidies are, in fact, often deployed for the purpose of subsidizing particular resources. *Id.* at 23-24; *see* Clean Energy Associations Rehearing and Clarification Request at 40-41. The Commission's response that general industrial development policies are categorically "too attenuated" to constitute a state subsidy for the purposes of the MOPR fails to wrestle with the evidence and arguments showing the opposite to be true.

today's orders were actually concerned about the price suppressive effects of state policies, general industrial development and local siting policies would have to be front and center in any rational response. The fact that they are not shows the extent to which the new MOPR is a campaign to stamp out disfavored state efforts to shape the generation mix and not to address capacity prices themselves.

55. The Commission's effort to justify that arbitrary line drawing only underscores the point. The Commission again asserts that the new MOPR is aimed only at state policies that are "most nearly . . . directed at or tethered to the" wholesale rate.[154] But as discussed above, that awkward repurposing of a preemption term of art does not make things any clearer.[155] It certainly does not explain why it is rational for the Commission to apply the new MOPR only to those state policies that it believes are close-to-but-not-preempted[156] or why the degree of "attenuation" is relevant in a proceeding that is nominally about actual effects on wholesale rates. Indeed, at no point in this proceeding has the Commission explained why, if the "problem" at hand is the effect of state policies on wholesale rates, it is reasonable to target only certain state efforts and not others that may well have a greater wholesale market effect.[157] The failure to do so is arbitrary and capricious.

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[154] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106; December 2019 Order, 169 FERC ¶ 61,239 at P 68.

[155] *See supra* note 23.

[156] *See id*.

[157] Throughout the December 2019 Rehearing Order, the Commission responds to this point by quoting portions of the December 2019 Order that describe the Commission's action without responding to this argument. *See, e.g.*, December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 106 ("As we said in the December 2019 Order, the expanded MOPR is not intended to address all commercial externalities or opportunities that might affect the economics of a particular resource."). Although that quote accurately describes what the Commission said in its earlier order, it does not respond to the arguments that the line drawing described in that quote is arbitrary and capricious. That is a not a reasoned response; rehearing orders are an opportunity to further explain the Commission's analysis, not just regurgitate it.

### d. **Addressing Only State Actions that Reduce Cost Is Arbitrary and Capricious**

56. The December 2019 Rehearing Order grants clarification that the Regional Greenhouse Gas Initiative (RGGI) is not an actionable subsidy.[158] I am glad to hear it. Although I maintain that the distinction drawn in today's order is inconsistent with the most natural reading of the Commission's subsidy definition,[159] just about anything that limits the extent of the Commission's interference with state resource decisionmaking is a step in the right direction.

57. But although that outcome may be a good one, it vividly illustrates the arbitrariness with which the Commission is going after state policies. The Commission's single-sentence clarification regarding RGGI is a little light on reasoning, but the upshot appears to be that RGGI does not cause problems for "market integrity,"[160] "investor confidence,"[161] "the first principles of capacity markets,"[162] or the "premise of a capacity markets"[163] because it addresses the externality of climate change by raising prices, rather than by lowering them. At no point, however, does the Commission explain why a state effort to tax the harm associated with a market failure is consistent with capacity markets, but a state effort to address the same harm by subsidizing resources that do not contribute to that externality is inconsistent with capacity markets. It may well be that a so-called "Pigouvian tax" is economically preferable to a "Pigouvian subsidy,"[164] but, even if true,

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[158] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 390.

[159] December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 23).

[160] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 301; June 2018 Rehearing Order, 171 FERC ¶ 61,034 at P 50; June 2018 Order, 163 FERC ¶ 61,236 at PP 1-2, 150, 156, 161.

[161] *ISO New England Inc.*, 162 FERC ¶ 61,205 at P 21; *see* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 141.

[162] *ISO New England Inc.*, 162 FERC ¶ 61,205 at P 21.

[163] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 320; December 2019 Order, 169 FERC ¶ 61,239 at P 17.

[164] Sylwia Bialek & Burcin Unel, Institute for Policy Integrity, Capacity Markets and Externalities: Avoiding Unnecessary and Problematic Reforms at 6-7 (2018).

that does explain why the former is consistent with the Commission's various capacity market buzzwords, but the latter is not.

58. In any case, the Commission's decision to find one approach inherently problematic and the other acceptable illustrates the extent to which it is meddling directly in state resource decisionmaking. Whatever you think about the economic merits of subsidies versus taxes as ways of addressing externalities, there should be no question that a state's choice between the two approaches is entirely the state's to make or that the Commission has no business in enacting regulations that give a preference to one approach over the other. In this example, the Commission's willingness to pick and choose which of the broadly equivalent state approaches to addressing climate change are allowed to affect the wholesale rate and which are not, is clear and unmistakable evidence of its meddling in decisions that the FPA expressly reserves to the states. The failure to recognize, much less explain, why it is appropriate to pick and choose which state policies are acceptable and which are not is arbitrary and capricious.

59. And that is particularly so given the structure and purpose of the capacity market, which exists to provide the "missing money.[165] Because the missing money is the *net* difference between a resource's revenue and its costs,[166] a resource should be indifferent, for the purposes of the capacity market, between a state policy that forces resources to internalize the cost of the externality or one that achieve the same thing by paying resources for not contributing to the externality. In other words, the Commission is relying on a distinction that is, for our purposes today, without a difference.

### 2. Ignoring the Cost Impacts of the New MOPR Is Arbitrary and Capricious

60. One of the most glaring omissions from the December 2019 order was its failure to make any effort to consider the costs of the new MOPR.[167] As the Commission acknowledges, "[s]etting a just and reasonable rate necessarily 'involves a balancing of the investor and consumer interests.'"[168] The Commission's various orders in this

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[165] *I.e.*, the capacity revenue a resource needs to be economic over and above what it earns in the energy and ancillary service markets. *N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121 (2020) (Glick, Comm'r, dissenting at P 4).

[166] Which is, after all, why the Commission's orders use net measures as the default offer floors for resources subject to the new MOPR. *See infra* PP 81-85.

[167] December 2019 Order, 169 FERC ¶ 61,239 at PP 54-57.

[168] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 139 (citing *NextEra*, 898 F.2d at 21).

proceeding spend plenty of time asserting that investors need sweeping reforms in order to remain "confident" in the PJM capacity market. Unfortunately, the costs to consumers of making investors so confident went unmentioned in both the Commission's June 2018 and December 2019 orders.

61. Many parties raised the Commission's failure to consider consumer interests on rehearing.[169] In response, the Commission recites general propositions about the importance of customer interests only to undercut itself almost immediately thereafter. For example, the Commission begins one paragraph by stating that it "disagree[s] that the Commission failed to consider the costs of the replacement rate."[170] But it then spends the rest of that paragraph explaining why it did not consider any estimate of the customer impacts before concluding that the resulting costs, whatever they may be, are necessarily just and reasonable because they "protect the integrity of the capacity market, which, in turn, ensures that investors will continue to be willing to develop resources to meet current and future reliability needs."[171] That sort of conclusory statement is hardly convincing evidence that the Commission actually took a hard look at the costs its orders will impose on customers.

62. The Commission dismisses as "speculative" any estimates of those costs. It would appear that a fair degree of work went into many of those estimates and I do not see the wisdom in dismissing them out-of-hand just because the details of the new MOPR have yet to be fully worked out.[172] After all, if the record provides enough evidence for the

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[169] *Id.* at n.330 (non-exhaustive list of fifteen different rehearing requests raising this point).

[170] *Id.* P 139.

[171] *Id.*

[172] *Id*. In so doing, the Commission goes out of its way to criticize what I described as a "conservative," "back-of-the-envelope" calculation meant to help fill the void left by the Commission's failure to seriously consider the December 2019 Order's financial impact on customers. *Id.* n.352. In particular, it points to doubts raised by the Market Monitor about whether that calculation considered the right quantity of to-be-MOPR megawatts of capacity from nuclear generators. *Id.* I assumed it would be 6,000 MW. The Market Monitor suggested that number would be closer to 4,000 MW. *Id.* He may be right; it is hard to say how an unprecedented mitigation regime will work in practice.

In any case today's order makes clear that my cost estimate was, if anything, too conservative. For one thing, my estimate did not consider the cost of paying twice for capacity as a result of MOPR'ing the tens of the thousands of megawatts of renewable

Commission to confidently assess that the costs of its new MOPR are worth it,[173] you would think it would provide enough evidence to at least gauge the likely impact on consumers.

63. In addition, there is every reason to believe that the actual costs of today's orders will increase with time. Although these orders aim to hamper state efforts to shape the generation mix, they likely will not snuff them out entirely. In other words, there simply is no reason to believe that the Commission will succeed in realizing its "idealized vision of markets free from the influence of public policies."[174] As former Chairman Norman Bay aptly put it, "such a world does not exist, and it is impossible to mitigate our way to its creation."[175]

64. But that means that, as a resource adequacy construct, the PJM capacity market will increasingly operate in an alternate reality, ignoring more and more resources just because they receive some form of state support. That also means that customers will increasingly be forced to pay twice for capacity or, to put it differently, to buy more unneeded capacity with each passing year. I cannot fathom how the costs imposed by a resource adequacy regime that is premised on ignoring actual capacity can ever be just and reasonable.

65. The Commission responds to this point by asserting that the costs of double-procuring capacity are irrelevant because *NJBPU* held that states may "appropriately bear the costs" of their resource decisionmaking, including the costs associated with resources

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resources slated to be developed in the region to meet state renewable energy targets over the coming years. Clean Energy Associations estimated that that cost will be between $14 and $24 billion over the next decade. Clean Energy Associations Rehearing and Clarification Request at 22-23. My estimate also did not attempt to assess the effects of the bizarre conclusion, affirmed today, that the default service auctions in PJM retail choice states are somehow "subsidies," which will subject the resources that serve significant fractions of load in those states to the MOPR. *See supra* PP 49-51. Those are just two examples, but they illustrate why I remain confident that, when the dust settles, that back-of-the-envelope calculation will prove to have been a conservative one.

[173] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 139-140 (asserting that while the "actual cost impacts of the replacement rate are speculative at this point," they will result in a rate increase the Commission deems just and reasonable).

[174] *N.Y. State Pub. Serv. Comm'n,* 158 FERC ¶ 61,137 (2017) (Bay, Chairman, concurring).

[175] *Id.*

whose capacity does not clear in the capacity auction.[176] As noted above, there are good reasons to pause before applying *NJBPU* whole hog to this proceeding.[177] In any case, the Commission's citation to that decision's jurisdictional analysis does not insulate today's orders from the charge that it is arbitrary and capricious to altogether disregard the costs imposed by forcing the capacity market to ignore resources that actually exist or will developed and procuring additional resources as if those ignored resources did not exist.[178] Those are real costs that are directly traceable to the Commission's orders and cannot logically be ignored by an agency claiming to balance "consumer interests."[179]

66. The record before us provides every reason to believe that this approach will lead to other significant cost increases. For example, the new MOPR will exacerbate the potential for the exercise of seller-side market power in what the Market Monitor has described as a structurally uncompetitive market.[180] As the Institute for Policy Integrity explained, expanding the MOPR will decrease the competitiveness of the market, both by reducing the number of resources offering below the MOPR price floor and by changing the opportunity cost of withholding capacity.[181] With more suppliers subject to administratively determined price floors, resources that escape the MOPR—or resources with a relatively low offer floor—can more confidentially increase their bids up to that level, secure in the knowledge that they will still under-bid the mitigated offers. That problem is compounded by PJM's weak seller-side market power mitigation rules, which

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[176] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 141.

[177] *See supra* PP 22-23.

[178] At various points, the Commission makes assertions, such as even the new MOPR forces customers to "pay twice" for capacity, "preserving the integrity of the capacity market will benefit customers over time by ensuring capacity is available when needed." December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 223. Conclusory assertions are the same thing as considering customers' interests.

[179] *Id.* P 139.

[180] *See* Market Monitor 2021/2022 BRA Analysis 2 ("The capacity market is unlikely ever to approach a competitive market structure in the absence of a substantial and unlikely structural change that results in much greater diversity of ownership. Market power is and will remain endemic to the structure of the PJM Capacity Market . . . . Reliance on the RPM design for competitive outcomes means reliance on the market power mitigation rules.")

[181] Institute for Policy Integrity Initial Brief at 14-16.

include a safe harbor for mitigation up to a market-seller offer cap that has generally been well above the market-clearing price.[182]

### 3. Disregarding the Effects of the New MOPR on Well-Established Business and Regulatory Models Is Arbitrary and Capricious

#### i. Demand Response

67. The PJM region has long benefitted from a robust participation of demand response resources. That is in part because PJM has had in place rules that accommodate short-lead-time resources. Specifically, the Commission has long recognized that demand response resources may not be identified years in advance of the delivery year.[183] Accordingly, PJM has permitted Curtailment Service Providers (CSP), *i.e.*, a demand response provider, to participate in the Base Residual Auction without identifying all end-use demand response resources at the time of the auction.[184] That has been fundamental to the demand response business model, since, without it, the short-lead time resources on which demand response depends might never be able to participate in the Base Residual Auction.[185]

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[182] For example, the RTO-wide market seller offer cap for the 2018 Base Residual Auction $237.56 per MW/day while the clearing price for the RTO-wide zone was $140.00 per MW/day. *See* PJM Interconnection, *2021/2022 RPM Base Residual Auction Results,* https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2021-2022/2021-2022-base-residual-auction-report.ashx (last visited Dec. 19, 2019).

[183] For example, recognizing that demand response is a "short-lead-time" resource, the Commission previously directed PJM to revise the allocation of the short-term resource procurement target so that short-lead-time resources have a reasonable opportunity to be procured in the final incremental auction. *PJM Interconnection L.L.C.*, 126 FERC ¶ 61,275 (2009). The Commission subsequently removed the short-term resource procurement target only after concluding that doing so would not "unduly impede the ability of Demand Resources to participate in PJM's capacity market." *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at PP 394, 397 (2015).

[184] Under PJM's current market rules, CSPs must submit a Demand Resource Sell Offer Plan (DR Sell Offer Plan) to PJM no later than 15 business days prior to the relevant RPM Auction. This DR Sell Offer Plan provides information that supports the CSP's intended DR Sell Offers and demonstrates that the DR being offered is reasonably expected to be physically delivered through Demand Resource Registrations for the relevant delivery year. *See* PJM Manual 18: PJM Capacity Market – Attachment C: Demand Resource Sell Offer Plan.

[185] As CPower and LSPower explain, such customers typically make participation

68. So much for that. The December 2019 Rehearing Order states that the new MOPR "may require aggregators and CSPs to know all of their demand response resource end-users prior to the capacity auction."[186] In addition, it appears to require that, for each resource with behind-the-meter generation, the CSP must identify the relative share of its capacity that results from demand reduction versus behind-the-meter generation.[187] And the CSP will have to know all of that three years before the delivery year. That is a stunning level of paperwork to impose on CSPs, which may well require many, if not most, of them to fundamentally change or altogether abandon their business model. I fail to see anything in this record that suggests that the Commission's concerns about state policies justifies that result.

69. While the grandfathered treatment provided to existing demand response resources could help blunt the impact of the new MOPR, the confusing language in the Commission's order raises more questions than it answers, leaving CSPs, PJM, and the Market Monitor with little guidance on how to mitigate demand response resources. Rather than explaining that the grandfathered treatment attaches to the resource itself, which would seem the only logical conclusion, the Commission adds that "Aggregators and CSPs will be considered to have previously cleared a capacity auction only if *all the individual resources within the offer* have cleared a capacity auction."[188] Why an entire a CSP's portfolio must receive all-or-nothing treatment is unclear, unexplained and raises fundamental questions about how this will work when resources switch CSPs, as they often do.[189]

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decisions in a shorter time frame than the three-year forward auction designed to reflect the time needed to develop a new generation facility. CPower/LSPower Rehearing Request at 11.

[186] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 266.

[187] In response to requests to clarify offer floors for demand response resources backed by a combination of behind-the-meter generation and reduced consumption, the Commission simply reiterates that the December 2019 Order found that different default offer price floors should apply to demand response backed by behind-the-meter generation and demand response backed by reduced consumption (*i.e.*, curtailment-based demand response programs). December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 187-188.

[188] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at 265 (emphasis added).

[189] In addition, the December 2019 Rehearing Order concludes that if a demand response resource earns any revenue through a state-sponsored *retail* demand response program, it is impermissibly subsidized and subject to the new MOPR. *Id.* P 264. But

70. The bottom line here is that the Commission's attempt to root out certain state "subsidies" manifests itself as an out-and-out attack on the demand response business model in PJM.[190] That attack is particularly unfortunate as PJM indicated that the default offer floor for at least certain demand response resources should be at or near zero,[191] suggesting that even if demand response resources receive a subsidy, that subsidy would not reduce their offer below what this Commission calls a "competitive offer." Demand response has provided tremendous benefits to PJM, both terms of improved market efficiency and increased reliability. I see no reason to give up those benefits based on an unsubstantiated concern about state policies.

**ii. Public Power**

71. Today's order also continues the Commission's attack on public power, dismissing the entire business model as a state subsidy and jeopardizing the viability of a construct that has long benefited customers. As ill-advised as that attack is, it is equally

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just a few months ago, the Commission approved rules in NYISO that treat a state retail demand response program as a subsidy for the purposes of the capacity *only* if the purpose of that state program is to procure demand response for its capacity value. *N.Y. Pub. Serv. Comm'n v. N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,120 (2020) ("[W]e will evaluate retail-level demand response programs on a program-specific basis to determine whether payments from those programs should be excluded from the calculation of SCRs' offer floors."). Those are radically different approaches to the permissible effects of state retail demand response programs, which cannot be papered over simply by observing that one set of rules apply in PJM and another in NYISO.

[190] Indeed, buried in footnotes in the December 2019 Rehearing Order, the Commission appears to insinuate that demand response resources, among other resources, should perhaps be kicked out of the capacity market entirely. *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at n.598. ("We pause to note that, as the capacity market has developed, an ever-growing number of resource types have come to participate in the market that were not contemplated. This proceeding . . . does not necessarily resolve issues regarding whether, to what extent, and under what terms resources that are not able to produce energy on demand should participate in the capacity market consistent with the Commission's mandate to ensure the reliability of the electric system"); *id.* n.451 ("The Commission is concerned that there may be a point where energy efficiency is unable to supply capacity when needed to maintain system reliability. However, that issue can be pursued in a separate proceeding.").

[191] PJM explains that, beyond the initial costs associated with developing a customer contract and installing any required hardware or software, it could not identify any avoidable costs that would be incurred by an existing Demand Resource that would result in a MOPR Floor Offer Price of greater than zero. PJM Initial Brief at 47.

unsupported. The Commission neither marshals evidence that the existence of public power has actually suppressed prices[192] nor addresses arguments that the type of balanced portfolio typically developed by public power entities will not have that effect.[193] The Commission's unsupported treatment of public power is, as PJM points out in its rehearing request, "overbroad and unwarranted."[194]

72. Today's order leaves public power with few options. Unlike most public utilities,[195] PJM's existing FRR option is not much good for many public power entities since "participating in the FRR option is an all-or-nothing proposition, and appeals as a practical matter only to large utilities that still follow the traditional, vertically integrated model."[196] In addition, the Commission concludes that third-party contracts signed by

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[192] The Commission offers no data, such as sell-offer data of utilities or public power entities or provides any evidence in support of this finding. *See* SMECO Rehearing Request at 6; Allegheny Rehearing Request at 12.

[193] After all, public power entities typically procure roughly the amount of supply needed to meet their demand. In response to arguments raising this point and contending that an approach based on net long, net short thresholds (which would formally require a rough equivalence between supply and demand to avoid mitigation) would be just and reasonable and more consistent with Commission precedent, *see* Public Power Entities Request for Rehearing and Clarification at 30-32; PJM Request for Rehearing and Clarification at 13-14; ODEC Request for Rehearing and Clarification at 7-9, today's order asserts that "the expanded MOPR is premised on a resource's ability to suppress price due to the benefit it receives from out-of-market support, not based on the likelihood and ability to exercise of buyer-side market power." December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 228. But the ability to "exercise" buyer-side market power is the ability to reduce prices. If public power entities' load equals their supply, their choice of how to serve that load will not cause price suppression plain and simple. The Commission has previously found such thresholds can protect against price suppression. *See N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,121, at P 90 (2020) (discussing buyer-side market power concerns associated with self-supply). It fails to provide a reasoned basis for rejecting the same approach today.

[194] PJM Rehearing and Clarification Request at 13.

[195] These terms get confusing quickly. Under the FPA, a "public utility" will typically be privately owned while an entity that is not a "public utility" will often be publically owned. *See* 16 U.S.C. §§ 824(e) & (f). Accordingly, "public power" is generally made up of non-public utilities.

[196] *NJBPU*, 744 F.3d at 84 (footnote omitted).

public power entities are also state subsidies.[197] That effectively forces public power to procure capacity based only on the narrow considerations evaluated in the PJM capacity market—a result inimical to the purpose of the public power model.

73. The public power model predates the capacity market by several decades and is premised on securing a reliable supply of power for each utility's citizen-owners at a reasonable and stable cost, which often includes an element of long-term supply.[198] The policy affirmed in today's order is a direct threat to the long-term viability of the public power model in PJM. Although the Commission exempts existing public power resources from the MOPR, it provides that all new public power development will be subject to mitigation. That means that public power's selection and development of new capacity resources will now be dependent on the capacity market outcomes, not the self-supply model on which it has traditionally relied. That fundamentally upends the public power model because it limits the ability of public power entities to choose how to develop and procure resources over a long time horizon.

**iii. Energy Efficiency**

74. The Commission is also arbitrary and capricious in its treatment of energy efficiency resources—*e.g.*, efficient light bulbs, air conditioning units, and water heaters whose installation reduces electricity use. Although energy efficiency resources reduce demand for electricity, they participate in the PJM capacity auction as "supply" for four years so that they can receive compensation for reducing the total amount of capacity needed in the region.[199] To make that work in practice, PJM "adds back" to the demand curve the capacity equivalent of any energy efficiency resources that participate in the auction.[200] Doing so ensures that the capacity provided by energy efficiency resources is not double counted.

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[197] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 243, 325.

[198] American Municipal Power and Public Power Association of New Jersey Initial Brief at 14-15; American Public Power Association Initial Brief at 15.

[199] PJM Manual 18B, Energy Efficiency Measurement & Verification 10-13, *available at* pjm.com/~/media/documents/manuals/ m18b.ashx. After those four years, energy efficiency resources no longer participate in the capacity auction and instead are recognized only as reductions in demand. *Id.*

[200] *Id. Participate*, not clear. That means that if an energy efficiency resource bids into, but does not clear the capacity market, its capacity is *still* added back to the demand curve. This is because as PJM explains, the auction parameters are adjusted by adding the MWs in approved energy efficiency plans that are proposed for that auction back into the reliability requirements. PJM Rehearing and Clarification Request at 15,

75. Today's order concludes that any energy efficiency resources that participate in the PJM capacity auction and receive a state subsidy suppress prices and, therefore, must be subjected to the new MOPR.[201] The record does not support that determination. As PJM's Market Monitor explained, including energy efficiency in the PJM capacity auction—by treating it as supply and then adding it back to the demand curve—actually *increases* the prices in that auction by roughly 10 percent, all else equal.[202] In other words, the record does not indicate that the energy efficiency resources participating in the capacity market (subsidized or otherwise) are having any price suppressive effect whatsoever. Instead, the record indicates that the only time energy efficiency resources can decrease capacity market prices is when, after four years, those resources no longer participate in the capacity market and are no longer subject to the new MOPR.[203]

76. Today's order completely fails to address these points even though PJM itself, not to mention several other parties, argued on rehearing that the Commission's approach to energy efficiency was inconsistent with its own theory of the case and would make a hash of the markets.[204] Instead, the Commission asserts that energy efficiency resources can cause price suppression because, according to the Commission, that is the inevitable result of subsidizing any resource.[205] To support that proposition, the Commission relies on a single piece of irrelevant arithmetic. It multiples the total MWs of energy efficiency

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n.41. For approved plans, that add back occurs whether or not resources will know if they cleared the auction.

[201] December 2019 Order, 169 FERC ¶ 61,239 at P 255.

[202] The Independent Market Monitor for PJM, *Analysis of the 2021/2022 RPM Base Residual Auction* 20 (2018), *available at* http://www.monitoringanalytics.com/reports/Reports/2018/IMM_Analysis_of_the_20212022_RPM_BRA_Revised_20180824.pdf (2018 PJM State of the Market Report).

[203] At that point, the energy savings from energy efficiency resources are "baked into" PJM's demand forecast and, thus, the resources are no longer eligible for a capacity payment for reducing demand relative to that projection.

[204] *E.g.*, PJM Rehearing and Clarification Request at 15 & n.41; Advanced Energy Entities at 12-15; CPower/LSPower Rehearing and Clarification Request at 6-8.

[205] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 257 ("We reject the contention that energy efficiency's market participation cannot suppress prices. State Subsidies, if effective, will by their very nature increase the quantity of whatever is subsidized. State subsidies to energy efficiency should result in additional energy efficiency resource participation.").

that cleared in the capacity market in a given year by the clearing price that year and asserts that the resulting figure shows that energy efficiency "has affected revenues in the PJM capacity market."[206] That may be true, but it does not shed any light whatsoever on whether energy efficiency, subsidized or not, suppresses the capacity market clearing price. Indeed, the Commission fails to wrestle with the fact that, as a result of the add-back provision, energy efficiency resources will not suppress the capacity clearing price. Calculating their total revenue does not change that fact.

77. In addition, the Commission blithely asserts that energy efficiency must be subject to the new MOPR because "[d]ecreased demand resulting from a State Subsidy will suppress prices just as a State Subsidy to supply will suppress prices."[207] That general statement proves too little. It simply cannot be the case that any action a state takes to conserve electricity is a "problem" for the Commission to fix. Instead, the state action can implicate the Commission's interests through resources' participation in the capacity market, if at all. As explained above, however, the record is clear that energy efficiency resources' participation in the capacity market does not have a price suppressive effect; quite the opposite, in fact. The Commission's failure to wrestle with the actual effects of energy efficiency participating as a capacity resource renders its justification for applying the MOPR to such resources arbitrary and capricious.

### iv. Voluntary RECs

78. Today's order grants clarification that "purely voluntary transactions for RECs are not considered State Subsidies." Again, I am glad to hear it. As I explained in my earlier dissent, transactions involving voluntary REC sales would not meet any reasonable definition of subsidy and would instead amount to "mitigating the impact of *consumer preferences* on wholesale electricity markets just because they may potentially overlap with state policies."[208] In addition, I noted that there were eminently reasonable ways to address the Commission's practical concerns about ensuring that voluntary RECs are not eventually used to comply with state mandates. I am glad to see that that view seems to have prevailed.

79. Nevertheless, today's order makes clear that voluntary RECs are not out of the woods yet. In a pair of ominous (and redundant) footnotes, the Commission's goes out of its way to assert that all today's order concludes is that voluntary RECs are not state subsidies and that, pardon the double negative, that conclusion is not a finding that

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[206] *Id.* P 256.

[207] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 257.

[208] December 2019 Order, 169 FERC ¶ 61,239 (Glick, Comm'r, dissenting at P 41) (footnotes and internal quotation marks omitted).

voluntary RECs do not distort capacity market outcomes.[209] If the question is whether consumers' voluntary decision to purchase clean energy could "distort" efficient market outcomes, the answer is a straightforward no. The fact that the Commission feels the need to go out of its way to preserve that question for a future proceeding is as ominous as it is unnecessary. It is both notable and concerning that the Commission did not feel the need to preserve the same question when addressing other voluntary out-of-market for capacity resources, such as sales of coal ash, which it describes as "similarly situated" to voluntary REC sales.[210]

### 4. Applying Different Offer Floors to New and Existing Resources Is Arbitrary and Capricious

80. As I explained in my dissent from the December 2019 Order, the Commission's imposition of disparate offer floors for new and existing resources is unjust and unreasonable, unduly discriminatory as well as arbitrary and capricious. Today's order affirms the decision to require new resources receiving a State Subsidy to be mitigated to Net Cost of New Entry (Net CONE) while existing resources receiving a State Subsidy are mitigated to their Net Avoidable Cost Rate (Net ACR). The Commission suggested that this distinction is appropriate because new and existing resources do not face the same costs.[211] In particular, the Commission suggested that setting the offer floor for new resources at Net ACR would be inappropriate because that figure "does not account for the cost of constructing a new resource."[212] Today's order uses more words to make the same points.[213]

81. Regardless, the Commission's distinction does not hold water. As the Market Monitor explained in his comments, it is illogical to distinguish between new and existing

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[209] *See* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at n.808 ("The treatment of voluntary RECs in this order is not a determination regarding whether the revenue from voluntary REC transactions results or could result in capacity market distortions."); *id.* n.807 (exact same point).

[210] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 326 (finding "to the extent coal ash sales are purely voluntary, such that they do not fall under the definition of State Subsidy, they are similarly situated to voluntary RECs, which are not mitigated under the replacement rate.").

[211] December 2019 Order, 169 FERC ¶ 61,239 at P 140.

[212] *Id*.

[213] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at PP 157-159.

resources when defining what is (or is not) a competitive offer.[214] That is because, as a result of how most resources are financed, a resource's costs will not materially differ based on whether it is new or existing (*i.e.*, one that has cleared a capacity auction). That means that there is no basis to apply a different formula for establishing a competitive offer floor based solely on whether a resource has cleared a capacity auction. To the extent it is appropriate to consider the cost of construction for a new resource it is just as appropriate to consider the cost of construction for one that has already cleared a capacity auction. That is consistent with Net CONE, which calculates the nominal 20-year levelized cost of a resource minus its expected revenue from energy and ancillary services. Because that number is *levelized*, it does not change between a resource's first year of operation and its second.

82. In addition, as the Market Monitor explains, Net CONE does not reflect how resources actually participate in the market.[215] Instead of bidding their levelized cost, both new and existing competitive resources bid their marginal capacity—*i.e.*, their net out-of-pocket costs, which Net ACR is supposed to reflect. Perhaps reasonable minds can differ on the question of which offer floor formula is the best choice to apply. But there is nothing in this record suggesting that it is appropriate to use different formulae based on whether the resource has already cleared a capacity auction.

83. It may be true that setting the offer floor at Net ACR for new resources will make it more likely that a subsidized resource will clear the capacity market, MOPR notwithstanding. Holding all else equal, the higher the offer floor, the less likely that a subsidized resources will clear, so a higher offer floor will more effectively block state policies. But that does not justify applying Net ACR to existing resources and Net CONE to new ones.

84. The purpose of a capacity market, the whole reason the market exists, is to ensure resource adequacy at just and reasonable rates.[216] It is a means, not an end. And for that purpose, a megawatt of capacity provided by a new resource is every bit as effective as a megawatt provided by an existing one. Applying entirely different bid floor formulae

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[214] Independent Market Monitor Brief at 16 ("A competitive offer is a competitive offer, regardless of whether the resource is new or existing."); *id*. at 15-16 ("It is not an acceptable or reasonable market design to have two different definitions of a competitive offer in the same market. It is critical that the definitions be the same, regardless of the reason for application, in order to keep price signals accurate and incentives consistent.").

[215] *Id*.

[216] *Cf.* December 2019 Rehearing Order, 171 FERC ¶ 61,035 at 230 ("The objective of the capacity market is to select the least cost resources to meet resource adequacy goals.").

based only on whether the resource is new or existing does not further that basic purpose. Instead, as the Commission all but admits,[217] the purpose those disparate bid floors serve is to make it easier to block the entry of state-subsidized resources. A capacity market designed first and foremost for the purpose of blocking state policies is one in which the tail truly wags the dog.[218]

## III. Today's Orders Are Not about Promoting Competition

85. By this point, the irony of today's orders should be clear. The Commission spends hundreds of pages decrying government efforts to shape the generation mix because they interfere with "competitive" forces.[219] In order to stamp out those efforts and promote its vision of "competition," the Commission creates a byzantine administrative pricing scheme that bears all the hallmarks of cost-of-service regulation, without any of the benefits. That is a truly bizarre way of fostering the market-based competition that these orders claim to so highly value.

86. It starts with the Commission's definition of subsidy, which encompasses vast swathes of the PJM capacity market, including new investments by vertically integrated utilities and public power, merchant resources that receive any one of the litany of subsidies available to particular resources or generation types, and any resource that benefits even indirectly from one of the many state default service auctions in PJM.[220] Moreover, the Commission's inaptly named Unit-Specific *Exemption*[221]—its principal

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[217] *Id.* P 158 ("Using Net ACR as the MOPR value for new resources would not serve the purpose of the MOPR, because it does not reflect new resources' actual costs of entering the market and therefore would not prevent uneconomic State-Subsidized Resources from entering the market."); December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 159 ("Using Net CONE as the default offer price floor for new resources will ensure that the expanded MOPR achieves its goal and prevents uneconomic new entry from clearing the capacity market as a result of State Subsidies").

[218] To appreciate this, one need only look at the Commission's apparent willingness to set certain resources offer floor—*i.e.*, their Net CONE—above the demand curve's intercept. That means that the Commission is willing to set price floors that ensure that ensure that those resource *can never* clear the capacity market, no matter how serious the reliability need and even if that resource is the only that can meet it. *See* Illinois Commission Rehearing Request at 18. In a choice between ensuring reliability and blocking state policies, the Commission will choose the latter.

[219] June 2018 Order, 163 FERC ¶ 61,236 at P 1.

[220] *See Supra* Section II.B.1.b.

response to concerns about over mitigation—is simply another form of administrative pricing.[222] All the Unit-Specific Exemption provides is an escape from the relevant default offer floor. Resources are still required to bid above an administratively determined price floor, not at the level that they believe would best would best serve their competitive interests.[223] Nor is it clear that this so-called exemption will even be resource-specific.[224] And even resources that might appear eligible for the Competitive Entry Exemption may hesitant to take that option given the Commission's proposal to permanently ban from the capacity market any resource that invokes that exception and later finds itself subsidized.[225] Are those resources really going to wager their ability to participate in the capacity market on the proposition that their state will never institute a non-bypassable policy that the Commission might deem an illicit financial benefit?

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[221] In the December 2019 Order, the Commission renamed what is currently the "Unit Specific *Exception*" in PJM's tariff to be a Unit Specific *Exemption*. But, regardless of name, it does not free resources from mitigation because they are still subject to an administrative floor, just a lower one. An administrative offer floor, even if based on the resource's actual costs does not protect against over-mitigation and certainly is not market competition.

[222] It bears repeating that the Commission has expressly abandoned market-power—the justification for cost-of-service regulation—as the basis for its new MOPR. December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 45 ("[T]he expanded MOPR does not focus on buyer-side market power mitigation.").

[223] *See* Public Power Entities Rehearing Request at 4 ("Ironically, by its latest action, the Commission has removed any remaining genuine market component . . .by requiring all 'competitive' offers to be determined administratively in Valley Forge, Pennsylvania.").

[224] The Commission is requiring that all new resources, regardless of type, must use a standard asset life. That flouts the entire premise of a Unit-Specific Exemption, which, the Commission reminds us throughout today's order, is supposed to reflect the *specific* unit's costs and expected market revenues. It is particularly, "arbitrary and illogical" to mandate that resources assume a 20-year asset life when most renewable units typical have a useful commercial life of 35 years. *See* Clean Energy Advocates Rehearing Request at 83. The Commission dismisses such concerns by stating that standardized inputs are a simplifying tool December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 290.

[225] December 2019 Order, 169 FERC ¶ 61,239 at P 162.

87. To implement this scheme, PJM and the Market Monitor will need to become the new subsidy police, regularly reviewing the laws and regulations of 13 different states and the District of Columbia—not to mention hundreds of localities and municipalities—in search of any provision or program that could conceivably fall within the Commission's definition of State Subsidy. "But that way lies madness."[226] It will also require PJM and the Market Monitor to identify any and all contracts power marketers have with resources that may be used to serve commitments incurred in a state default service auction. Rooting through retail auctions results and hundreds of different sets of laws and regulations looking for anything that might be "nearly tethered" to wholesale rates is hardly a productive use of anyone's time.

88. And identifying the potential subsidies is just the start. Given the consequences of being subsidized, today's orders will likely unleash a torrent of litigation over what constitutes a subsidy and which resources are or are not subsidized. Next, PJM will have to develop default offer floors for all relevant resource types, including many that have never been subject to mitigation in PJM or anywhere else—*e.g.*, demand response resources, energy efficiency resources, or resources whose primary function is not generating electricity. Moreover, given the emphasis that the Commission puts on the Unit-Specific Exemption as the solution to concerns about over-mitigation, we can expect that resources will attempt to show that their costs fall below the default offer floor, with many resorting to litigation should they fail to do so. The result of all this may be full employment for energy lawyers, but it is hardly the most obvious way to harness the forces of competition.

89. Finally, although this administrative pricing regime is likely to be as complex and cumbersome as cost-of-service regulation, it provides none of the benefits that a cost-of-service regime can provide. Most notably, the administrative pricing regime is a one-way ratchet that will only increase the capacity market clearing price. Unlike cost-of-service regulation, there is no mechanism for ensuring that bids reflect true costs. Nor does this pricing regime provide any of the market-power protections provided by the cost-of-service model. Once mitigated, resources are required to offer no *lower* than their administratively determined offer floor, but there is no similar prohibition on offering above that floor.[227]

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[226] David Roberts, *Trump's crude bailout of dirty power plants failed, but a subtler bailout is underway* (Mar. 23, 2018), https://www.vox.com/energy-and-environment/2018/3/23/17146028/ferc-coal-natural-gas-bailout-mopr.

[227] Moreover, as discussed above, *see supra* P 67, PJM's capacity market is structurally uncompetitive and lacks any meaningful market mitigation. There is every reason to believe that today's orders will exacerbate the potential for the exercise of market power.

## IV. Today's Orders Are Instead All about Slowing the Clean Energy Transition

90. If they do not promote competition, today's orders certainly serve an alternative, overarching purpose: Slowing the region's transition to a clean energy future. Customers throughout PJM, not to mention several of the PJM states, are increasingly demanding that their electricity come from clean resources. Today's orders represent a major obstacle to those goals. Although even this Commission won't come out and say that, the cumulative effect of the various determinations in today's orders is unmistakable. It helps to rehash in one place what the mitigation regime affirmed in the December 201 Rehearing Order will do.

91. First, after establishing a broad definition of subsidy, the Commission creates several categorical exemptions that overwhelmingly benefit existing resources. Indeed, the exemptions for (1) renewable resources, (2) self-supply, and (3) demand response, energy efficiency, and capacity storage resources are all limited to existing resources.[228] That means that all those resources will never be subjected to the MOPR and can continue to bid into the market at whatever level they choose, while every comparable new resource must run the administrative pricing gauntlet. In addition, new natural gas resources remain subject to the MOPR.[229] All told, those exemptions provide a major benefit to existing resources.

92. Second, as noted above, the Commission creates different offer floors for existing and new resources.[230] Using Net CONE for new resources and Net ACR for existing resources will systematically make it more likely that existing resources of all types can remain in the market, even if they have higher costs than new resources that might otherwise replace them. As the Market Monitor put it, this disparate treatment of new and existing resources "constitute[s] a noncompetitive barrier to entry and . . . create[s] a noncompetitive bias in favor of existing resources and against new resources of all types, including new renewables and new gas fired combined cycles."[231]

93. Third, the mitigation scheme imposed by today's orders will likely cause a large and systematic increase in the cost of capacity. Although that will appear as a rate increase for consumers, it will be a windfall to existing resources that clear the capacity market. That windfall will make it more likely that any particular resource will stay in

[228] December 2019 Order, 169 FERC ¶ 61,239 at PP 173, 202, 208.

[229] *Id.* PP 2, 42.

[230] *See supra* Section II.B.4.

[231] Internal Market Monitor Reply Brief at 4.

the market, even if there is another resource that could supply the same capacity at less cost to consumers.

94. Finally, the December 2019 Order again dismisses the June 2018 Order's fig leaf to state authority: The resources-specific FRR Alternative.[232] That potential path for accommodation was what allowed the Commission to profess that it was not attempting to "“disregard” or “nullify” state public policies. Although implementing that option would no doubt have been a daunting task, doing so at least had the potential to establish a sustainable market design by allowing state policies to have their intended effect on the resource mix. And that is why it is no longer on the table. It could have provided a path for states to continue shaping the energy transition—exactly what this new construct is designed to stop.

95. The Commission proposes various justifications for each of these changes, some of which are more satisfying than others. But don't lose the forest for the trees. At every meaningful decision point in today's orders, the Commission has elected the path that will make it more difficult for states to shape the future resource mix. Nor should that be any great surprise. Throughout this proceeding, the Commission has focused narrowly on states' exercise of their authority over generation facilities, treating state authority as a problem that must be remedied by a heavy federal hand. The only thing that was new in the December 2019 order was the extent to which the Commission was willing to go. Whereas the June 2018 Order at least paid lip service to the importance of accommodating state policies,[233] the December 2019 Order—and today's orders—are devoid of any comparable sentiment.

96. In addition, in a now-familiar pattern, today's orders put almost no flesh on the bones of the Commission's edicts and provide precious little guidance how the new MOPR will work in practice. Most of the actual work will come in the compliance proceedings, not to mention the coming litany of section 205 filings, section 206 complaints, and petitions for declaratory orders seeking guidance on fact patterns that the Commission, by its own admission, has not yet bothered to contemplate. In each of those proceedings, the smart money should be on the Commission adopting what it will claim to be facially neutral positions that, collectively, entrench the current resource mix. Although the proceedings to come will inevitably garner less attention than today's orders, they will be the path by which the “quiet undoing” of state policies progresses.[234]

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[232] December 2019 Rehearing Order, 171 FERC ¶ 61,035 at P 348; June 2018 Order, 163 FERC ¶ 61,236 at P 157.

[233] June 2018 Order, 163 FERC ¶ 61,236 at P 161.

[234] Danny Cullenward & Shelley Welton, *The Quiet Undoing: How Regional Electricity Market Reforms Threaten State Clean Energy Goals*, 36 Yale J. on Reg. Bull.

97. The December 2019 Rehearing Order is a concerning preview of that process. In the two thousand-plus pages of rehearing requests filed in response to December 2019 Order, parties raised a wide range of concerns. Today's orders duck almost every single one, falling back on generalizations and a single-minded focus on extirpating the effects of state policies. Although the order is long in pages, it is short on any serious effort to grapple with or explain the implications of the Commission's actions. Moreover, in the few instances in which the Commission gave ground, such as voluntary RECs, it did so only with an ominous warning that is likely to cause more confusion than it clears up.[235] Everything about today's orders should concern those with a stake in a durable resource adequacy construct in PJM.

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98. At this point, the die has been cast. Today's orders make unambiguously clear that the Commission intends to array PJM's capacity market rules against the interests of consumers and of states seeking to exercise their authority over generation facilities. For all the reasons discussed above, these orders are illegal, illogical, and truly bad public policy.

99. But, even beyond that, today's orders are deeply disappointing because they will fracture PJM, the largest RTO in the country. As I predicted in my dissent from the December 2019 Order, states throughout the region are already looking for ways to pull their utilities out of the capacity market rather than remain under rules designed to damage their interests. Today's orders snuff out what little hope may have remained that the Commission would again change course and adopt a more sensible market design. As a result, states committed to exercising their rights under FPA section 201(b) will have little choice but to exit the capacity market. I strongly urge PJM to work with the states and provide them the time needed to make the transition as smooth as possible.

100. Fostering large regional markets for energy, ancillary services, and capacity, has been one of the Commission's principal successes over the last quarter century. I hate to see that success undone based on an obsession with blocking the effects of state public policies. But, unfortunately, the Commission chose the path that it did. In so doing, we have abdicated the leadership role that we ought to have taken in developing a resource adequacy paradigm that accommodates the fundamental changes currently under way in the electricity sector.

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106, 108 (2019), *available at* https://www.yalejreg.com/bulletin/the-quiet-undoing-how-regional-electricity-market-reforms-threaten-state-clean-energy-goals/.

[235] *See supra* p 79; *see also supra* note 190.

101. The irony in all this is that the Commission asserts that it is acting to “save” the capacity market even as it sets the market on a course toward its eventual demise.

For these reasons, I respectfully dissent.

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Richard Glick
Commissioner

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Calpine Corp.; Dynegy Inc.; Eastern Generation, LLC; Homer City Generation, L.P.; NRG Power Marketing LLC; GenOn Energy Management, LLC; Carroll County Energy LLC; C.P. Crane LLC; Essential Power, LLC; Essential Power OPP, LLC; Essential Power Rock Springs, LLC; Lakewood Cogeneration, L.P.; GDF SUEZ Energy Marketing NA, Inc.; Oregon Clean Energy, LLC; and Panda Power Generation Infrastructure Fund, LLC | Docket Nos. | EL16-49-002<br>EL18-178-002<br>(Consolidated) |

v.

PJM Interconnection, L.L.C.

PJM Interconnection, L.L.C.

ERRATA NOTICE

(April 16, 2020)

On April 16, 2020, the Commission issued an "Order on Rehearing" in the above-captioned proceeding. *Calpine Corp., et al. v. PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,035 (2020). This Errata Notice corrects the Order on Rehearing to remove Paragraph 82 in its entirety and replace it with the following:

> 82. Further, we disagree that retail rate riders do not affect existing resources' continued operation or participation in the capacity market or supply-side participation in the PJM capacity market. Retail rate riders guarantee a level of cost recovery and, as such, are connected to the wholesale procurement or sale of electricity or support the construction, development, and operation of new and existing capacity resources.

Nathaniel J. Davis, Sr.,
Deputy Secretary.

# Attachment B

**FERC** Online - Web Applications of the Federal Energy Regulatory Commission



**FERC Online Home**
About FERC Online
**Log Out**
**Edit Registration**
Company Registration
**eFiling**
**eSubscription**
**eComment**
**Query Mailing List/Recipients by State**
**Query Service List**
**My Service List**
**My Filing List**
**eLibrary**
eTariff Viewer
Help

Service List for EL16-49-000 Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Power Marketing LLC, GenOn Energy Management, LLC, Carroll County Energy LLC, C.P. Crane LLC, et al. v. PJM Interconnection, L.L.C.

Contacts marked ** must be postal served

| Party | Primary Person or Counsel of Record to be Served | Other Contact to be Served |
|---|---|---|
| Allco Renewable Energy Limited | Thomas Melone<br>CEO<br>1740 Broadway<br>FL 15<br>New York, NEW YORK 10019<br>UNITED STATES<br>thomas.melone@gmail.com | |
| American Electric Power Service Corporation | Anne Vogel<br>American Electric Power Service Corporation<br>1 Riverside Plaza<br>Floor 29<br>Columbus, OHIO 43215<br>UNITED STATES<br>amvogel@aep.com | Steven J Ross<br>Steptoe & Johnson LLP<br>1330 Connecticut Ave, NW<br>Washington, DISTRICT OF COLUMBIA 20036<br>sross@steptoe.com |
| American Forest & Paper Association | Robert Weishaar<br>McNees Wallace & Nurick LLC<br>1200 G Street, NW<br>Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>bweishaar@mcneeslaw.com | Susan E Bruce<br>McNees Wallace & Nurick LLC<br>100 Pine St<br>Harrisburg, PENNSYLVANIA 17101<br>sbruce@mcneeslaw.com |
| American Forest & Paper Association | | Kenneth R Stark<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>kstark@mcneeslaw.com |
| American Forest & Paper Association | | Matthew Garber<br>Attorney<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>mgarber@mcneeslaw.com |
| American Municipal Power, Inc. | Gary Newell<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street, N.W.<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>gnewell@jsslaw.com | Lisa G McAlister<br>Deputy General Counsel - FERC/<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>lmcalister@amppartners.org |
| American Municipal Power, Inc. | | Christopher J Norton<br>Director of Market Regulatory<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>cnorton@amppartners.org |
| American Municipal Power, Inc. | | Kristin V Rothey<br>Asst. Deputy General Counsel<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>krothey@amppartners.org |

| | | |
|---|---|---|
| AMERICAN PETROLEUM INSTITUTE | Marty Durbin<br>Executive Director, Market Dev<br>AMERICAN PETROLEUM INSTITUTE<br>1220 L Street NW<br>Washington, DISTRICT OF COLUMBIA<br>UNITED STATES<br>durbinm@api.org | |
| American Public Power Association | | Delia D. Patterson, ESQ<br>General Counsel<br>American Public Power Association<br>2451 Crystal Drive<br>Suite 1000<br>Arlinton, VIRGINIA 22202<br>dpatterson@publicpower.org |
| American Public Power Association | | Elise Caplan<br>EMRI Coordinator<br>American Public Power Association<br>1875 Connecticut Avenue, NW<br>Suite 1200<br>Washington, DISTRICT OF COLUMBIA 20009<br>ecaplan@publicpower.org |
| American Wind Energy Association | eugene grace<br>Regulatory Attorney<br>1501 M St NW, Ste 1000<br>washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>ggrace@awea.org | |
| Bayonne Plant Holding, L.L.C. | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Brandon Shores LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Brookfield Energy Marketing LP | Kelly Harris<br>Brookfield Energy Marketing LP<br>41 rue Victoria<br>Gatineau, QUEBEC J8X 2A1<br>CANADA<br>kelly.harris@brookfieldrenewable.com | Aleksandar Mitreski<br>Brookfield Energy Marketing Inc.<br>68 Ellington St<br>Longmeadow, MASSACHUSETTS 01106<br>aleksandar.mitreski@brookfieldrenewable.com |
| Brookfield Energy Marketing LP | | Nicolas Bosse<br>Manager Regulatory Affairs - I<br>Brookfield Energy Marketing Inc.<br>1501 McGill College<br>Suite 1602<br>Montreal, QUEBEC H3A 3M8<br>nicolas.bosse@brookfieldrenewable.com |
| Brookfield Energy Marketing LP | | Steve Kelly<br>Director<br>Brookfield Energy Marketing LP<br>3261 Arters Mill Rd<br>Westminster, MARYLAND 21158<br>stephen.kelly@brookfieldrenewable.com |
| Brunner Island, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |

| | | |
|---|---|---|
| Buckeye Power, Inc. | Marvin Griff<br>Partner<br>Thompson Hine LLP<br>1919 M Street, N.W.<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20036-1600<br>UNITED STATES<br>marvin.griff@thompsonhine.com | Kurt Helfrich<br>6677 Busch Boulevard<br>Columbus, OHIO 43229<br>khelfrich@ohioec.org |
| C.P. Crane LLC | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Calpine Corporation | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Calpine Corporation | Stephanie Lim<br>Counsel<br>King & Spalding LLP<br>McDermott Will & Emery<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001-1531<br>UNITED STATES<br>slim@mwe.com | |
| Calpine Corporation | Sarah Novosel<br>Senior VP and Managing Counsel<br>Calpine Corporation<br>805 15th Street, NW<br>Suite 708<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>snovosel@calpine.com | |
| Camden Plant Holding, L.L.C. | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Carroll County Energy LLC | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Carroll County Energy LLC | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| CPV Power Holdings, LP | Larry Eisenstat<br>Partner<br>Crowell & Moring LLP | Nathan B Rushing<br>Director<br>8403 Colesville Road |

| | | |
|---|---|---|
| | 1001 Pennsylvania Ave. N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>leisenstat@crowell.com | Suite 915<br>Silver Spring, MARYLAND 20910<br>nrushing@cpv.com |
| CPV Power Holdings, LP | | Jonathan C. Odell, ESQ<br>General Counsel<br>8403 Colesville Road<br>Suite 915<br>Silver Spring, MARYLAND 20910<br>jodell@cpv.com |
| CPV Power Holdings, LP | | thomas rumsey<br>50 Braintree Hill Office Park, Suite 300<br>Braintree, MASSACHUSETTS 02184<br>trumsey@cpv.com |
| Dayton Power and Light Company | Randall Griffin<br>Chief Regulatory Counsel<br>Dayton Power and Light Company, The<br>1065 Woodman Drive<br>Dayton, OHIO 45432<br>UNITED STATES<br>randall.griffin@aes.com | John W Horstmann<br>Dayton Power and Light Company, The<br>315 Buckwalter Rd<br>Phoenixville, PENNSYLVANIA 19460<br>john.horstmann@aes.com |
| Delaware Public Service Commission | | Joseph DeLosa, III<br>Public Utility Analyst<br>Delaware Public Service Commission<br>861 Silver Lake Blvd.<br>Cannon Bldg. Suite 100<br>Dover, DELAWARE 19904<br>joseph.delosa@state.de.us |
| Direct Energy | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | Andrea R Kells<br>McGuireWoods LLP<br>2600 Two Hannover Square<br>P.O. Box 27507<br>Raleigh, NORTH CAROLINA 27601<br>akells@mcguirewoods.com |
| Division of Rate Counsel | Henry Ogden<br>Asst. Dep. Rate Counsel<br>New Jersey Department of the Public Advocate<br>PO Box 46005<br>Trenton,NEW JERSEY 07101-8003<br>UNITED STATES<br>hogden@rpa.nj.gov | Felicia Thomas-Friel, ESQ<br>Deputy Rate Counsel<br>140 East Front Street<br>4th Floor<br>Trenton, NEW JERSEY 08625<br>fthomas@rpa.nj.gov |
| Dominion Resources Services, Inc. | Christopher Jones<br>Troutman Sanders LLP<br>401 9th Street NW<br>TROUTMAN SANDERS LLP<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>christopher.jones@troutmansanders.com | Christopher Nalls<br>Associate<br>Troutman Sanders LLP<br>401 9th Street, N.W.<br>Suite 1000<br>Washington, DISTRICT OF COLUMBIA 20004<br>christopher.nalls@troutmansanders.com |
| Dominion Resources Services, Inc. | Michael Regulinski<br>Assistant General Counsel<br>120 Tredegar Street<br>RS-2<br>Richmond, VIRGINIA 23231-9<br>UNITED STATES<br>Michael.Regulinski@Dom.com | |
| Duke Energy Corporation | Sheri May<br>Associate General Counsel<br>INDIVIDUAL<br>139 East Fourth St.<br>Cincinnati, OHIO 45202<br>UNITED STATES<br>sheri.may@duke-energy.com | |
| Dynegy Inc. | Michelle Grant<br>Corporate Counsel<br>INDIVIDUAL<br>601 Travis Street Suite 1400 | |

| | | |
|---|---|---|
| | Houston, TEXAS 77002<br>UNITED STATES<br>michelle.d.grant@dynegy.com | |
| Dynegy Inc. | Stephanie Lim<br>Counsel<br>King & Spalding LLP<br>McDermott Will & Emery<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001-1531<br>UNITED STATES<br>slim@mwe.com | |
| Dynegy Inc. | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Eastern Generation, LLC | John Reese<br>Senior Vice President<br>300 Atlantic St 5th Floor<br>Stamford, CONNECTICUT 06901<br>UNITED STATES<br>jreese@easterngen.com | |
| Eastern Generation, LLC | Liam Baker<br>Vice President Regulatory Affa<br>US Power Generating Co., LLC<br>300 Atlantic Street<br>5th floor<br>Stamford, CONNECTICUT 06901<br>UNITED STATES<br>lbaker@easterngen.com | |
| Eastern Generation, LLC | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Eastern Generation, LLC | Stephanie Lim<br>Counsel<br>King & Spalding LLP<br>McDermott Will & Emery<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001-1531<br>UNITED STATES<br>slim@mwe.com | |
| EDF Renewable Energy, Inc. | Bruce Grabow<br>ICC Energy Corporation<br>701 East Street N.W.<br>Wash, DISTRICT OF COLUMBIA 75206<br>UNITED STATES<br>bgrabow@lockelord.com | |
| Electric Power Supply Association | Nancy Bagot<br>Vice President<br>Electric Power Supply Association<br>1401 New York Ave. NW<br>11th FLoor<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>NancyB@epsa.org | |
| Electric Power Supply Association, | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP | Nancy Bagot<br>Vice President<br>Electric Power Supply Association |

| | | |
|---|---|---|
| Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Companies | 500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | 1401 New York Ave. NW<br>11th FLoor<br>Washington, DISTRICT OF COLUMBIA 20005<br>NancyB@epsa.org |
| Electric Power Supply Association, Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Companies | | Sarah G. Novosel, ESQ<br>Senior VP and Managing Counsel<br>Calpine Corporation<br>805 15th Street, NW<br>Suite 708<br>Washington, DISTRICT OF COLUMBIA 20005<br>snovosel@calpine.com |
| Electric Power Supply Association, Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Companies | | Michelle D Grant<br>Corporate Counsel<br>INDIVIDUAL<br>601 Travis Street Suite 1400<br>Houston, TEXAS 77002<br>michelle.d.grant@dynegy.com |
| Electric Power Supply Association, Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Companies | | Abraham Silverman<br>Assistant General Counsel - Re<br>NRG Energy, Inc.<br>211 Carnegie Center Drive<br>Princeton, NEW JERSEY 08540<br>abe.silverman@nrg.com |
| Electric Power Supply Association, Calpine Corporation, Dynegy Inc., Eastern Generation, LLC, Homer City Generation, L.P., NRG Companies | | Liam T Baker,, Esq<br>Manager, Regulatory<br>lbaker@uspowergen.com |
| Electricity Consumers Resource Council | W. Richard Bidstrup<br>Cleary, Gottlieb, Steen & Hamilton LLP<br>2000 Pennsylvania Ave, NW<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>rbidstrup@cgsh.com | |
| Elmwood Park Power, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Energy Capital Partners IV, LLC | Andrew Gilbert<br>agilbert@ecpartners.com | Jim Ginnetti<br>jim@jimginnetticonsultingllc.com |

| | | |
|---|---|---|
| Enerwise Global Technologies, Inc. | Gregory Lawrence<br>Partner<br>Greenberg Traurig, LLP<br>One International Place<br>Boston, MASSACHUSETTS 02110<br>UNITED STATES<br>lawrenceg@gtlaw.com | |
| ENVIRONMENTAL DEFENSE FUND | Michael Panfil<br>Attorney<br>ENVIRONMENTAL DEFENSE FUND<br>1875 Connecticut Ave NW, Ste 600<br>Washington, DISTRICT OF COLUMBIA 20009<br>UNITED STATES<br>mpanfil@edf.org | John Finnigan<br>jfinnigan@edf.org |
| Essential Power, LLC, Essential Power OPP, LLC, Essential Power Rock Springs, LLC, Lakewood Cogeneration, L.P., | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Exelon Corporation | Christopher Wilson<br>Director, Federal Regulatory A<br>Exelon Corporation<br>101 Constitution Ave, NW<br>Suite 400E<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>FERCe-filings@exeloncorp.com | Carrie H Allen<br>Assistant General Counsel<br>Exelon Corporation<br>101 Constitution Ave. NW Suite 400 East<br>Washington, DISTRICT OF COLUMBIA 20001<br>carrie.allen@exeloncorp.com |
| Exelon Corporation | | Colleen C Farrell<br>Exelon Corporation<br>101 Constitution Ave NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>colleen.farrell@exeloncorp.com |
| Exelon Corporation | | Jason C Barker, ESQ<br>Vice President, Energy Policy<br>Constellation Energy Group Inc.<br>111 Market Place<br>Suite 500<br>Baltimore, MARYLAND 21202<br>jason.barker@constellation.com |
| FirstEnergy Service Company | | P. Nikhil Rao<br>76 South Main St.<br>Akron, OHIO 44308<br>pnrao@firstenergycorp.com |
| FirstEnergy Service Company | Evan Dean<br>Attorney<br>FirstEnergy<br>76 S. Main St.<br>Akron, OHIO 44224<br>UNITED STATES<br>edean@firstenergycorp.com | Morgan Parke ESQ<br>Attorney<br>FirstEnergy<br>76 South Main Street<br>Akron, OHIO 44308-1890<br>mparke@firstenergycorp.com |
| FirstEnergy Service Company | | Sharon Noewer<br>slnoewer@firstenergycorp.com |
| GDF SUEZ Energy Marketing NA, Inc. | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Governors' Wind & Solar Energy Coalition | Larry Pearce<br>Executive Director<br>2200 Wilson Blvd, ste 102-22 | |

| | | |
|---|---|---|
| | Arlington, VIRGINIA 22201<br>UNITED STATES<br>larry@governorscoalition.org | |
| H.A. Wagner LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Homer City Generation, L.P. | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| Homer City Generation, L.P. | Stephanie Lim<br>Counsel<br>King & Spalding LLP<br>McDermott Will & Emery<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001-1531<br>UNITED STATES<br>slim@mwe.com | |
| Illinois Citizens Utility Board | | Kristin Munsch<br>Attorney<br>Citizens Utility Board of Illinois<br>309 W. Washington St. Ste. 800<br>Chicago, ILLINOIS 60202<br>kmunsch@citizensutilityboard.org |
| Illinois Commerce Commission | Christine Ericson<br>Special Assistant Attorney Gen<br>Illinois Commerce Commission<br>160 N. LaSalle St.<br>Suite C-800<br>Chicago, ILLINOIS 60601<br>UNITED STATES<br>Christine.Ericson@illinois.gov | Randy Rismiller<br>Federal Energy Program Manager<br>Illinois Commerce Commission<br>527 East Capitol Avenue<br>Springfield, ILLINOIS 62701<br>rrismill@icc.illinois.gov |
| Illinois Commerce Commission | | Donald William VanderLaan<br>Economic Analyst<br>INDIVIDUAL<br>527 East Capitol Ave<br>Springfield, ILLINOIS 62701<br>bvanderl@icc.illinois.gov |
| Illinois Industrial Energy Consumers | Eric Robertson<br>INDIVIDUAL<br>1939 Delmar Avenue<br>P. O. Box 735<br>Granite City, ILLINOIS 62040<br>UNITED STATES<br>erobertson@lrklaw.com | |
| Illinois Municipal Electric Agency | | Troy A Fodor<br>Illinois Municipal Electric Agency<br>3400 Conifer Drive<br>Springfield, ILLINOIS 62711<br>tfodor@imea.org |
| Indiana Utility Regulatory Commission | Beth Heline<br>General Counsel<br>Indiana Utility Regulatory Commission<br>Suite 1500 East<br>101 West Washington Street<br>Indianapolis, INDIANA 46204<br>UNITED STATES<br>BHeline@urc.in.gov | Jeremy Comeau<br>Indiana Utility Regulatory Com<br>Indiana Utility Regulatory Commission<br>101 W. Washington St.<br>Suite 1500 E.<br>Indianapolis, INDIANA 46204<br>jcomeau@urc.in.gov |

| | | |
|---|---|---|
| Industrial Energy Users-Ohio | Robert Weishaar<br>McNees Wallace & Nurick LLC<br>777 North Capitol St, NE, Suite 401<br>Washington, DISTRICT OF COLUMBIA 20002<br>UNITED STATES<br>rweishaa@mwn.com | |
| Invenergy Thermal Development LLC | Nicole Luckey<br>Invenergy LLC<br>1 South Wacker<br>Suite 1800<br>Chicago, ILLINOIS 60606<br>UNITED STATES<br>nluckey@invenergyllc.com | |
| Invenergy Wind Development LLC | Nicole Luckey<br>Invenergy LLC<br>1 South Wacker<br>Suite 1800<br>Chicago, ILLINOIS 60606<br>UNITED STATES<br>nluckey@invenergyllc.com | |
| J-POWER USA Development Co., Ltd. | Matthew Keenan<br>J-POWER USA Development Co. Ltd.<br>1900 East Golf Rd, Ste. 1030<br>Schaumburg, ILLINOIS 60173<br>UNITED STATES<br>mkeenan@jpowerusa.com | |
| Kentucky Attorney General | Larry Cook<br>Kentucky Attorney General<br>700 Capitol Ave.<br>Frankfort, KENTUCKY 40601<br>UNITED STATES<br>larry.cook@ky.gov | Rebecca W Goodman, ESQ<br>Exec. Dir. Rate Intervention,<br>Kentucky Attorney General<br>1024 Capital Center Drive<br>Frankfort, KENTUCKY 40601<br>Rebecca.Goodman@ky.gov |
| Kentucky Attorney General | | Lawrence Cook<br>700 Capitol Ave.<br>Ste. 20<br>Frankfort, KENTUCKY 40601-8204<br>larry.cook@ag.ky.gov |
| Longroad Development Company, LLC | Larry Eisenstat<br>Partner<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave. N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>leisenstat@crowell.com | Patricia M Alexander<br>Advisor<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave. N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>palexander@crowell.com |
| Longroad Development Company, LLC | | Diana Jeschke<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave NW<br>Washington, DISTRICT OF COLUMBIA 20004<br>djeschke@crowell.com |
| Longroad Development Company, LLC | | Vanessa Kwong<br>Counsel<br>Longroad Energy Management, LLC<br>735 Montgomery Street<br>Suite 480<br>San Francisco, CALIFORNIA 94111<br>vanessa.kwong@longroadenergy.com |
| Lower Mount Bethel Energy, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Loxbridge Partners LLC | Mark Steinley<br>Rivertec Partners LLC<br>1026 Sarah St<br>Pittsburgh, PENNSYLVANIA 15203 | |

| | | |
|---|---|---|
| | UNITED STATES<br>msteinley@bkmcapital.com | |
| LS Power Associates, L.P. | Tom Hoatson<br>1 Tower Center<br>East Brunswick, NEW JERSEY 08816<br>UNITED STATES<br>thoatson@lspower.com | |
| LS Power Associates, L.P. | | Neil L Levy<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>nlevy@mwe.com |
| Martins Creek, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Maryland Office of People's Counsel | William Fields<br>Deputy People's Counsel<br>6 St. Paul St., Ste 2102<br>Baltimore, MARYLAND 21202<br>UNITED STATES<br>william.fields@maryland.gov | |
| Maryland Public Service Commission | Miles Mitchell<br>Deputy General Counsel<br>Maryland Public Service Commission<br>6 St. Paul Street<br>16th Floor, William Donald Schaefer Tower<br>Baltimore, MARYLAND 21202<br>UNITED STATES<br>miles.mitchell@maryland.gov | |
| Michigan Agency for Energy | Spencer Sattler<br>Assistant Attorney General<br>Michigan Attorney General<br>7109 W. Saginaw Hwy.<br>3rd Floor<br>Lansing, MICHIGAN 48917<br>UNITED STATES<br>sattlers@michigan.gov | |
| Michigan Attorney General | Spencer Sattler<br>Assistant Attorney General<br>Michigan Attorney General<br>7109 W. Saginaw Hwy.<br>3rd Floor<br>Lansing, MICHIGAN 48917<br>UNITED STATES<br>sattlers@michigan.gov | |
| Michigan Public Service Commission | Spencer Sattler<br>Assistant Attorney General<br>Attorney General<br>7109 W. Saginaw Hwy.<br>3rd Floor<br>Lansing, MICHIGAN 48917<br>UNITED STATES<br>sattlers@michigan.gov | Steven D Hughey<br>Assistant Attorney General<br>Department of Attorney General<br>7109 W. Saginaw Hwy.<br>3rd Floor<br>Lansing, MICHIGAN 48917<br>hugheys@michigan.gov |
| Monitoring Analytics, LLC | Jeffrey Mayes<br>General Counsel<br>Monitoring Analytics, LLC<br>2621 Van Buren Avenue, Suite 160<br>Valley Forge Corporate Center<br>Eagleville, PENNSYLVANIA 19403<br>UNITED STATES<br>jeffrey.mayes@monitoringanalytics.com | Suzette N Krausen<br>Executive Assistant<br>Monitoring Analytics, LLC<br>2621 Van Buren Ave Ste 160<br>Norristown, PENNSYLVANIA 19403<br>Suzette.Krausen@monitoringanalytics.com |
| Monitoring Analytics, LLC | | Joseph Bowring<br>Monitoring Analytics, LLC<br>2621 Van Buren Avenue, Suite 160<br>Norristown, PENNSYLVANIA 19403 |

| | | |
|---|---|---|
| | | Joseph.Bowring@monitoringanalytics.com |
| Montour, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| National Rural Electric Cooperative Association | Paul Breakman<br>Attorney<br>National Rural Electric Cooperative Association<br>1575 Eye Street, NW<br>Suite 300<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>paul.breakman@nreca.coop | |
| NATURAL GAS SUPPLY ASSOCIATION | Patricia Jagtiani<br>Executive Vice President<br>NATURAL GAS SUPPLY ASSOCIATION<br>1620 I Street NW, Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>pjagtiani@ngsa.org | Paul F Forshay<br>Attorney<br>Eversheds Sutherland (US) LLP<br>700 Sixth Street, N.W.<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20001-3980<br>PaulForshay@eversheds-sutherland.com |
| NATURAL RESOURCES DEFENSE COUNCIL | Tom Rutigliano<br>Sr. Advocate<br>NATURAL RESOURCES DEFENSE COUNCIL<br>1124 15th St. NW<br>Suite 300<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>trutigliano@nrdc.org | |
| New England Power Pool Participants Committee | Sebastian Lombardi<br>Day Pitney LLP<br>242 Trumbull Street<br>Hartford, CONNECTICUT 06103-1212<br>UNITED STATES<br>slombardi@daypitney.com | Sunita Paknikar<br>Day Pitney LLP<br>242 Trumbull St.<br>Hartford, CONNECTICUT 06103<br>spaknikar@daypitney.com |
| New England States Committee on Electricity | Jason Marshall<br>Senior Counsel<br>New England States Committee on Electricity<br>New England States Committee on Electricity<br>4 Bellows Road<br>Westborough, MASSACHUSETTS 01581<br>UNITED STATES<br>jasonmarshall@nescoe.com | |
| New Jersey Board of Public Utilities | | Alex Moreau, ESQ<br>Deputy Attorney General<br>Attorney General of the State of New Jersey<br>Law & Public Safety, Division of Law, 124 Halsey Street<br>P.O. Box 45029<br>Newark, NEW JERSEY 07101<br>Alex.Moreau@law.njoag.gov |
| New Jersey Board of Public Utilities | | Cynthia Holland<br>New Jersey Board of Public Utilities<br>44 South Clinton Avenue<br>Trenton, NEW JERSEY 08625-0350<br>Cynthia.Holland@bpu.nj.gov |
| New Jersey Board of Public Utilities | Pamela Owen<br>Attorney General of the State of New Jersey<br>pamela.owen@law.njoag.gov | Paul Youchak<br>Attorney General of the State of New Jersey<br>25 Market Street<br>Trenton, NEW JERSEY 08611<br>paul.youchak@law.njoag.gov |

| | | |
|---|---|---|
| New Jersey Board of Public Utilities | Paul Youchak<br>New Jersey Department of Law and Public Safety<br>25 Market Street<br>Trenton, NEW JERSEY 08611<br>UNITED STATES<br>paul.youchak@law.njoag.gov | Joseph DeLosa, III<br>FERC Specialist<br>New Jersey Board of Public Utilities<br>44 S. Clinton Ave<br>Trenton, NEW JERSEY 08609<br>joseph.delosa@bpu.nj.gov |
| New Jersey Board of Public Utilities | Cynthia Holland<br>New Jersey Board of Public Utilities<br>44 South Clinton Avenue<br>Trenton, NEW JERSEY 08625-0350<br>UNITED STATES<br>Cynthia.Holland@bpu.nj.gov | Emily Smithman<br>Emily.Smithman@bpu.nj.gov |
| New Jersey Division of Rate Counsel | Felicia Thomas-Friel<br>Deputy Rate Counsel<br>140 East Front Street<br>4th Floor<br>Trenton, NEW JERSEY 08625<br>UNITED STATES<br>fthomas@rpa.nj.gov | Henry M. Ogden, ESQ<br>Asst. Dep. Rate Counsel<br>New Jersey Department of the Public Advocate<br>PO Box 46005<br>Trenton,NEW JERSEY 07101-8003<br>hogden@rpa.nj.gov |
| Newark Bay Cogeneration Partnership, L.P. | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| NextEra Energy Resources, LLC | W. Mason Emnett<br>Senior Attorney<br>Florida Power & Light Company<br>801 Pennsylvania Ave., N.W.<br>Suite 220<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>mason.emnett@fpl.com | |
| North Carolina Electric Membership Corporation | Richard Feathers<br>North Carolina Electric Membership Corporation<br>PO Box 27306<br>Select or enter,NORTH CAROLINA 27611-7306<br>UNITED STATES<br>rick.feathers@ncemcs.com | Brenda Lynam<br>Legal<br>North Carolina Electric Membership Corporation<br>PO Box 27306<br>Raleigh,NORTH CAROLINA 27611-7306<br>brenda.lynam@ncemcs.com |
| North Carolina Electric Membership Corporation | Charles Bayless<br>Associate General Counsel<br>North Carolina Electric Membership Corporation<br>3400 Sumner Boulevard<br>Raleigh, NORTH CAROLINA 27616<br>UNITED STATES<br>charlie.bayless@ncemcs.com | |
| North Carolina Electric Membership Corporation | Sean Beeny<br>Attorney<br>INDIVIDUAL<br>1301 K Street N.W.<br>Suite 1000 West<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>sbeeny@mccarter.com | |
| North Carolina Electric Membership Corporation | Denise Goulet<br>Partner<br>McCarter & English, LLP<br>1301 K Street, N.W.<br>Suite 1000 West<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES | |

| | | |
|---|---|---|
| | dgoulet@mccarter.com | |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Abraham Silverman<br>Assistant General Counsel - Re<br>NRG Energy, Inc.<br>211 Carnegie Center Drive<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>abe.silverman@nrg.com | |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Cortney Slager<br>Assistant General Counsel - Re<br>NRG Companies<br>804 Carnegie Center<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>cortney.slager@nrg.com | |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Stephanie Lim<br>Counsel<br>King & Spalding LLP<br>McDermott Will & Emery<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001-1531<br>UNITED STATES<br>slim@mwe.com | |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | David Tewksbury<br>Partner<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>dtewksbury@mwe.com | |
| NUCLEAR ENERGY INSTITUTE | Ellen Ginsberg<br>Vice Presidet, Secretary, and<br>NUCLEAR ENERGY INSTITUTE<br>1776 I Street, NW<br>Suite 400<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>ecg@nei.org | Jonathan Rund<br>Associate General Counsel<br>NUCLEAR ENERGY INSTITUTE<br>Nuclear Energy Institute<br>1201 F Street, NW, Suite 1100<br>Washington, DISTRICT OF COLUMBIA 20004<br>jmr@nei.org |
| Nucor Steel Marion | Michael Lavanga<br>Stone Mattheis Xenopoulos & Brew, PC<br>1025 Thomas Jefferson Street, N.W.<br>8th Floor, West Tower<br>Washington, DISTRICT OF COLUMBIA 20007<br>UNITED STATES<br>mkl@smxblaw.com | |
| Ohio Consumers' Counsel | Kevin Moore<br>Assistant Consumers' Counsel<br>Office of the Ohio Consumers' Counsel<br>10 West Broad Street<br>Suite 1800<br>Columbus, OHIO 43215<br>UNITED STATES<br>kevin.moore@occ.ohio.gov | |
| Ohio Energy Group | Michael Kurtz<br>Esquire<br>BOEHM, KURTZ & LOWRY<br>36 E. Seventh St., Suite 1510<br>Cincinnati, OHIO 45202<br>UNITED STATES<br>mkurtz@bkllawfirm.com | KIM E. NONELLE<br>PARALEGAL<br>AK Steel Corporation<br>36 E. SEVENTH ST., SUITE 1510<br>CINCINNATI, OHIO 45202<br>kwalton@bkllawfirm.com |
| Ohio Energy Group | | Kurt J. Boehm, ESQ<br>Partner<br>36 E. Seventh St., Suite 1510<br>Cincinnati, OHIO 45202<br>kboehm@bkllawfirm.com |

| | | |
|---|---|---|
| Ohio Environmental Council | Trent Dougherty<br>General Counsel<br>Ohio Environmental Council<br>1145 Chesapeake Ave.<br>Suite I<br>Columbus, OHIO 43212<br>UNITED STATES<br>tdougherty@theoec.org | |
| Old Dominion Electric Cooperative | Adrienne Clair<br>Thompson Coburn LLP<br>Stinson Leonard Street LLP<br>1909 K Street NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>aclair@thompsoncoburn.com | Rebecca Shelton<br>1909 K Street, N.W., Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006-1167<br>rshelton@thompsoncoburn.com |
| Pedricktown Cogeneration Company LP | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Pennsylvania Public Utility Commission | Aspassia Staevska<br>Assistant Counsel<br>Pennsylvania Public Utility Commission<br>400 North Street<br>Harrisburg, PENNSYLVANIA 17120<br>UNITED STATES<br>astaevska@pa.gov | |
| People of the State of Illinois | Susan Satter<br>Senior Assistant Attorney Gene<br>Illinois Office of Attorney General<br>100 West Randolph Street<br>11th Floor<br>Chicago, ILLINOIS 60601<br>UNITED STATES<br>ssatter@atg.state.il.us | |
| PJM Industrial Customer Coalition | Robert Weishaar<br>McNees Wallace & Nurick LLC<br>777 North Capitol St, NE, Suite 401<br>Washington, DISTRICT OF COLUMBIA 20002<br>UNITED STATES<br>rweishaa@mwn.com | |
| PJM Interconnection, L.L.C. | Jennifer Tribulski<br>Senior Counsel<br>PJM Interconnection, L.L.C.<br>2750 Monroe Boulevard<br>Audubon, PENNSYLVANIA 19403<br>UNITED STATES<br>jennifer.tribulski@pjm.com | CRAIG GLAZER<br>V.P., Federal Gov't Policy<br>PJM Interconnection, L.L.C.<br>1200 G Street, N.W.<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>CRAIG.GLAZER@PJM.COM |
| PJM Interconnection, L.L.C. | Jennifer Tribulski<br>Senior Counsel<br>PJM Interconnection, L.L.C.<br>2750 Monroe Boulevard<br>Audubon, PENNSYLVANIA 19403<br>UNITED STATES<br>jennifer.tribulski@pjm.com | CRAIG GLAZER<br>V.P., Federal Gov't Policy<br>PJM Interconnection, L.L.C.<br>1200 G Street, N.W.<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>CRAIG.GLAZER@PJM.COM |
| PJM Interconnection, L.L.C. | Chenchao Lu<br>Counsel<br>PJM Interconnection, L.L.C.<br>2750 Monroe Blvd.<br>Audubon, PENNSYLVANIA 19403<br>UNITED STATES<br>chenchao.lu@pjm.com | |

| | | |
|---|---|---|
| PJM Interconnection, L.L.C. | Paul Flynn<br>PJM Interconnection, L.L.C.<br>1200 G St. NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>flynn@wrightlaw.com | |
| PJM Interconnection, L.L.C. | Ryan Collins<br>Attorney<br>PJM Interconnection, L.L.C.<br>1200 G Street, N.W., Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>collins@wrightlaw.com | |
| PJM Power Providers Group | Glen Thomas<br>1060 First Avenue<br>Suite 400<br>King of Prussia, PENNSYLVANIA 19406<br>UNITED STATES<br>gthomas@gtpowergroup.com | Diane L Slifer<br>1060 First Avenue<br>Suite 400<br>King of Prussia, PENNSYLVANIA 19406<br>dslifer@gtpowergroup.com |
| PJM Power Providers Group | | Laura Chappelle<br>4218 Jacob Meadows<br>Okemos, MICHIGAN 48864<br>laurac@chappelleconsulting.net |
| PPL Electric Utilities Corporation | Steven Nadel<br>PPL Services Corporation<br>2 North 9th St<br>Allentown, PENNSYLVANIA 18101<br>UNITED STATES<br>SMNadel@pplweb.com | William Keyser, III<br>K&L Gates LLP<br>1601 K Street, NW<br>Washington, DISTRICT OF COLUMBIA 20006<br>william.keyser@klgates.com |
| PSEG Companies | | Sheree L. Kelly, ESQ<br>Assistant General Regulatory C<br>PSEG Services Corporation<br>80 Park Plaza, T5G<br>Newark, NEW JERSEY 07102<br>Sheree.Kelly@PSEG.com |
| PSEG Energy Resources & Trade LLC | Kenneth Carretta<br>Deputy General Counsel/Chief<br>PSEG Energy Resources & Trade LLC<br>80 Park Plaza, T5G<br>Newark, NEW JERSEY 07102<br>UNITED STATES<br>kenneth.carretta@pseg.com | Raymond V. DePillo<br>80 Park Plaza<br>T19<br>Newark, NEW JERSEY 07102<br>Raymond.Depillo@pseg.com |
| PSEG Energy Resources & Trade LLC | Cara Lewis<br>Assistant Regulatory Counsel<br>80 Park Plaza, T5<br>Newark, NEW JERSEY 07102<br>UNITED STATES<br>cara.lewis@pseg.com | |
| PSEG Power LLC | Kenneth Carretta<br>Deputy General Counsel/Chief<br>PSEG Energy Resources & Trade LLC<br>80 Park Plaza, T5G<br>Newark, NEW JERSEY 07102<br>UNITED STATES<br>kenneth.carretta@pseg.com | |
| PSEG Power LLC | Cara Lewis<br>Assistant Regulatory Counsel<br>80 Park Plaza, T5<br>Newark, NEW JERSEY 07102<br>UNITED STATES<br>cara.lewis@pseg.com | |
| PUBLIC CITIZEN, INC | Tyson Slocum<br>Director<br>Public Citizen's Energy Program<br>215 Pennsylvania Ave SE<br>Washington, DISTRICT OF COLUMBIA | |

| | | |
|---|---|---|
| | 20003<br>UNITED STATES<br>tslocum@citizen.org | |
| Public Power Association of New Jersey | Jill Barker<br>Counsel<br>Betts & Holt LLP<br>1101 Connecticut Ave., NW<br>Suite 450<br>Washington, DISTRICT OF COLUMBIA 20036<br>UNITED STATES<br>jmb@bettsandholt.com | |
| Public Service Electric and Gas Company | Kenneth Carretta<br>Deputy General Counsel/Chief<br>PSEG Energy Resources & Trade LLC<br>80 Park Plaza, T5G<br>Newark, NEW JERSEY 07102<br>UNITED STATES<br>kenneth.carretta@pseg.com | Jodi Moskowitz<br>Gen. Reg. Counsel<br>PSEG Services Corporation<br>80 Park Plz # T5G<br>Newark, NEW JERSEY 07102<br>Jodi.Moskowitz@PSEG.com |
| Public Service Electric and Gas Company | Cara Lewis<br>Assistant Regulatory Counsel<br>80 Park Plaza, T5<br>Newark, NEW JERSEY 07102<br>UNITED STATES<br>cara.lewis@pseg.com | |
| Public Utilities Commission of Ohio | Thomas McNamee<br>Assistant Attorney General<br>Ohio Public Utilities Commission<br>30 East Broad Street<br>16th fl<br>Columbus, OHIO 43215<br>UNITED STATES<br>thomas.mcnamee@ohioattorneygeneral.gov | |
| Raven Power Marketing LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Retail Energy Supply Association | Elizabeth Whittle<br>Partner<br>Nixon Peabody LLP<br>401 Ninth Street, N.W<br>Suite 900<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>ewhittle@nixonpeabody.com | |
| Rockland Capital | | Jonathan Beach<br>24 Waterway Avenue<br>Suite 800<br>The Woodlands, TEXAS 77380<br>jonathan.beach@rocklandcapital.com |
| Sapphire Power Marketing LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Shell Energy North America (U.S.), LP | Matthew Picardi<br>Vice President<br>Coral Power LLC<br>36 Pinewood Ave.<br>Saratoga Springs, NEW YORK 12866<br>UNITED STATES<br>Matthew.Picardi@shell.com | |

| | | |
|---|---|---|
| Southern Maryland Electric Cooperative, Inc. | John Rohrbach<br>ACES POWER MARKETING<br>4140 West 99th Street<br>Carmel, INDIANA 46032<br>UNITED STATES<br>JRohrbach@acespower.com | |
| Southern Maryland Electric Cooperative, Inc. | Eugene Bradford<br>Vice President, Rates and Ener<br>SOUTHERN MARYLAND ELECTRIC COOP INC<br>15035 Burnt Store Rd.<br>Hughesville, MARYLAND 20637<br>UNITED STATES<br>Eugene.Bradford@smeco.coop | |
| Southern Maryland Electric Cooperative, Inc. | Mark MacDougall<br>Senior Vice President and Gene<br>PO Box 1937<br>Hughesville,MARYLAND 20637-1937<br>UNITED STATES<br>mark.macdougall@smeco.coop | |
| Spiegel & McDiarmid LLP | Peter Hopkins<br>Spiegel & McDiarmid<br>Spiegel & McDiarmid LLP<br>1875 Eye Street NW<br>7th Floor<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>peter.hopkins@spiegelmcd.com | Scott H. Strauss, ESQ<br>Spiegel & McDiarmid LLP<br>1875 Eye Street NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>Scott.Strauss@spiegelmcd.com |
| Spiegel & McDiarmid LLP | Amber Martin Stone<br>Associate<br>Spiegel & McDiarmid LLP<br>Spiegel & McDiarmid LLP<br>1875 Eye Street, NW, Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>amber.martin@spiegelmcd.com | Jeffrey A Schwarz<br>1875 Eye Street, N.W., Suite 700<br>Washington, DISTRICT OF COLUMBIA 20036<br>jeffrey.schwarz@spiegelmcd.com |
| Steel Producers | Damon Xenopoulos<br>Principal<br>Stone Mattheis Xenopoulos & Brew, PC<br>1025 Thomas Jefferson Street NW<br>WASHINGTON, DISTRICT OF COLUMBIA 20007<br>UNITED STATES<br>dex@smxblaw.com | |
| Susquehanna Nuclear, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| Sustainable FERC Project | Miles Farmer<br>Sustainable FERC Project<br>40 W. 20th St.<br>New York, NEW YORK 10011<br>UNITED STATES<br>mfarmer.fercproject@gmail.com | |
| Talen Energy Marketing, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |
| The Hershey Company | Pamela Polacek<br>McNees Wallace & Nurick LLC<br>PO Box 1166 | |

| | | |
|---|---|---|
| | Harrisburg,PENNSYLVANIA 17108-1166<br>UNITED STATES<br>ppolacek@mwn.com | |
| York Generation Company LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | Sandra E. Rizzo<br>Partner<br>ARNOLD & PORTER<br>601 Massachusetts Ave., NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>Sandra.Rizzo@arnoldporter.com |

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Service List for EL18-178-000 PJM Interconnection, L.L.C.

Contacts marked ** must be postal served

| Party | Primary Person or Counsel of Record to be Served | Other Contact to be Served |
|---|---|---|
| Acciona Energy USA Global LLC | William DeGrandis<br>Partner<br>Paul Hastings LLP<br>875 15TH STREET, NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>billdegrandis@paulhastings.com | Jenna McGrath<br>Associate<br>Paul Hastings LLP<br>875 15th Street, N.W.<br>Washington, DISTRICT OF COLUMBIA 20005<br>jennamcgrath@paulhastings.com |
| Acciona Wind Energy USA LLC | William DeGrandis<br>Partner<br>Paul Hastings LLP<br>875 15TH STREET, NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>billdegrandis@paulhastings.com | Jenna McGrath<br>Associate<br>Paul Hastings LLP<br>875 15th Street, N.W.<br>Washington, DISTRICT OF COLUMBIA 20005<br>jennamcgrath@paulhastings.com |
| Advanced Energy Management Alliance | Katherine Hamilton<br>Principal<br>1200 18th Street, NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20036<br>UNITED STATES<br>katherine@38northsolutions.com | |
| Algonquin Energy Services Inc. | Sarah Knowlton<br>General Counsel<br>116 North Main Street<br>Concord, NEW HAMPSHIRE 03301<br>UNITED STATES<br>sarah.knowlton@libertyutilities.com | Patrick Taylor<br>Patrick.Taylor@algonquinpower.com |
| Allco Renewable Energy Limited | Thomas Melone<br>CEO<br>1740 Broadway<br>FL 15<br>New York, NEW YORK 10019<br>UNITED STATES<br>thomas.melone@gmail.com | |
| Allegheny Electric Cooperative, Inc. | Joshua Adrian<br>INDIVIDUAL<br>1667 K Street, NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>jea@dwgp.com | Roberta Rothschild<br>Legal Assistant<br>Duncan Weinberg Genzer & Pembroke, PC<br>1667 K Street NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>RR@dwgp.com |
| Allegheny Electric Cooperative, Inc. | Matthew Rudolphi<br>Attorney<br>Duncan, Weinberg, Genzer & Pembroke PC<br>1667 K Street, NW, Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>mrr@dwgp.com | |
| Ameren Services Company | Joseph Power<br>Vice President<br>Ameren Services Company<br>1331 Pennsylvania Ave, NW | Joseph M Power<br>Vice President<br>Ameren Services Company<br>1331 Pennsylvania Ave, NW |

| | | |
|---|---|---|
| | Suite 512N<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>jpower@ameren.com | Suite 512N<br>Washington, DISTRICT OF COLUMBIA 20004<br>jpower@ameren.com |
| Ameren Services Company | | Denice Simpson<br>Regulatory Affairs<br>Ameren Corporation<br>1331 Pennsylvania Ave, NW<br>Suite 550 South<br>Washington, DISTRICT OF COLUMBIA 20004<br>dsimpson@ameren.com |
| American Coalition for Clean Coal Electricity | Michelle Bloodworth<br>COO<br>American Coalition for Clean Coal Electricity<br>1155 15th Street NW, Suite 900<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>mbloodworth@americaspower.org | |
| American Electric Power Service Corporation | Jessica Cano<br>Senior Counsel<br>AEP Service Corporation<br>1 Riverside Plaza<br>Columbus, OHIO 43215<br>UNITED STATES<br>jacano@aep.com | |
| American Forest & Paper Association | Robert Weishaar<br>McNees Wallace & Nurick LLC<br>1200 G Street, NW<br>Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>bweishaar@mcneeslaw.com | Susan E Bruce<br>McNees Wallace & Nurick LLC<br>100 Pine St<br>Harrisburg, PENNSYLVANIA 17101<br>sbruce@mcneeslaw.com |
| American Forest & Paper Association | | Kenneth R Stark<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>kstark@mcneeslaw.com |
| American Forest & Paper Association | | Matthew Garber<br>Attorney<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>mgarber@mcneeslaw.com |
| American Municipal Power, Inc. | Lisa McAlister<br>Deputy General Counsel - FERC/<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>UNITED STATES<br>lmcalister@amppartners.org | Kristin V Rothey<br>Asst. Deputy General Counsel<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>krothey@amppartners.org |
| American Municipal Power, Inc. | | Christopher J Norton<br>Director of Market Regulatory<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>cnorton@amppartners.org |
| American Municipal Power, Inc. | | Gary James Newell<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street, N.W.<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>gnewell@jsslaw.com |

| | | |
|---|---|---|
| AMERICAN PETROLEUM INSTITUTE | Ben Norris<br>Senior Counsel<br>AMERICAN PETROLEUM INSTITUTE<br>1220 L St. NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>norrisb@api.org | |
| American Public Power Association | John McCaffrey<br>Regulatory Counsel<br>American Public Power Association<br>2451 Crystal Drive<br>Suite 1000<br>Arlington, VIRGINIA 22202<br>UNITED STATES<br>jmccaffrey@publicpower.org | Delia D. Patterson, ESQ<br>General Counsel<br>American Public Power Association<br>2451 Crystal Drive<br>Suite 1000<br>Arlinton, VIRGINIA 22202<br>dpatterson@publicpower.org |
| American Public Power Association | | Elise Caplan<br>EMRI Coordinator<br>American Public Power Association<br>1875 Connecticut Avenue, NW<br>Suite 1200<br>Washington, DISTRICT OF COLUMBIA 20009<br>ecaplan@publicpower.org |
| ARIPPA | Jaret Gibbons<br>Executive Director<br>ARIPPA<br>2015 Chestnut St<br>Camp Hill, PENNSYLVANIA 17011<br>UNITED STATES<br>jgibbons@arippa.org | Cristy Doyle<br>Office Manager<br>ARIPPA<br>2015 Chesnut St.<br>Camp Hill, PENNSYLVANIA 17011<br>cdoyle5@arippa.org |
| Avangrid Renewables, LLC | Dennis Hough<br>Director - Regulatory Policy<br>Avangrid, Inc.<br>Avangrid<br>607 14th Street NW Suite 540<br>INC000000498534<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>dennis.hough@avangrid.com | Kevin Kilgallen<br>Director, Market Structure & P<br>Avangrid Renewables, LLC<br>411 Oakland Drive<br>Downingtown, PENNSYLVANIA 19335<br>kevin.kilgallen@avangrid.com |
| Avangrid Renewables, LLC | | Christian G Yoder<br>Sr. Counsel, Avangrid Renewab<br>Avangrid Renewables, LLC<br>1125 NW Couch St. Suite 700<br>Portland, OREGON 97209<br>christian.yoder@avangrid.com |
| Brookfield Energy Marketing LP | Kelly Harris<br>Brookfield Energy Marketing LP<br>41 rue Victoria<br>Gatineau, QUEBEC J8X 2A1<br>CANADA<br>kelly.harris@brookfieldrenewable.com | Aleksandar Mitreski<br>Brookfield Energy Marketing Inc.<br>68 Ellington St<br>Longmeadow, MASSACHUSETTS 01106<br>aleksandar.mitreski@brookfieldrenewable.com |
| Brookfield Energy Marketing LP | | Nicolas Bosse<br>Manager Regulatory Affairs - I<br>Brookfield Energy Marketing Inc.<br>1501 McGill College<br>Suite 1602<br>Montreal, QUEBEC H3A 3M8<br>nicolas.bosse@brookfieldrenewable.com |
| Brookfield Energy Marketing LP | | Steve Kelly<br>Director<br>Brookfield Energy Marketing LP<br>3261 Arters Mill Rd<br>Westminster, MARYLAND 21158<br>stephen.kelly@brookfieldrenewable.com |
| Buckeye Power, Inc. | Marvin Griff<br>Partner<br>Thompson Hine LLP<br>1919 M Street, N.W. | Kurt Helfrich<br>Buckeye Power, Inc.<br>6677 Busch Boulevard<br>Columbus, OHIO 43229 |

| | | |
|---|---|---|
| | Suite 700<br>Washington, DISTRICT OF COLUMBIA 20036-1600<br>UNITED STATES<br>marvin.griff@thompsonhine.com | khelfrich@ohioec.org |
| Calpine Corporation | Sarah Novosel<br>Senior VP and Managing Counsel<br>Calpine Corporation<br>805 15th Street, NW<br>Suite 708<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>snovosel@calpine.com | |
| Calpine Corporation | | David Scarpignato<br>Director Governmental & Regula<br>Calpine Corporation<br>623 Glenbrook Drive<br>Middletown, MARYLAND 21769<br>scarp@calpine.com |
| Calpine Corporation | | Joe Kerecman<br>joe.kerecman@calpine.com |
| Carroll County Energy LLC | Arnold Wallenstein<br>Senior Vice President and Gene<br>Advanced Power Services (NA) Inc.<br>31 Milk Street, Suite 1001<br>Boston, MASSACHUSETTS 02109<br>UNITED STATES<br>awallenstein@Advancedpowerna.com | |
| Central Hudson Gas & Electric Corporation | John Borchert<br>Manager, Elec. Engr. Services<br>284 South Ave<br>Poughkeepsie, NEW YORK 12601<br>UNITED STATES<br>jborchert@cenhud.com | |
| Cogentrix Energy Power Management, LLC | Christopher Sherman<br>Vice President, Cogentrix<br>Cogentrix Energy Power Management, LLC<br>3 Mill Street<br>Arlington, MASSACHUSETTS 02476<br>UNITED STATES<br>chrissherman@cogentrix.com | |
| Connecticut Department of Energy and Environmental Protection | Kirsten Rigney<br>Connecticut Department of Energy & Environmental Protection<br>10 Franklin Square<br>New Britain, CONNECTICUT 06051<br>UNITED STATES<br>Kirsten.Rigney@ct.gov | Robert Snook<br>Connecticut Department of Energy and Environmental Protection<br>10 Franklin Square<br>New Britain, CONNECTICUT 06106<br>robert.snook@ct.gov |
| Connecticut Public Utilities Regulatory Authority | Clare Kindall<br>Solicitor General<br>Office of Attorney General<br>165 Capitol Avenue<br>Hartford, CONNECTICUT 06106<br>UNITED STATES<br>Clare.Kindall@ct.gov | Seth A. Hollander<br>Assistant Attorney General<br>10 Franklin Square<br>New Britain, CONNECTICUT 06051<br>seth.hollander@ct.gov |
| Connecticut Public Utilities Regulatory Authority | | Robert Luysterborghs<br>Principal Attorney<br>Connecticut Public Utilities Regulatory Authority<br>Public Utilities Regulatory Authority<br>10 Franklin Square<br>New Britain, CONNECTICUT 06051<br>robert.luysterborghs@ct.gov |
| Consolidated Edison Company of New York, Inc. | Susan LoFrumento<br>Associate Counsel<br>Consolidated Edison Company of New York, Inc.<br>4 Irving Place | |

| | | |
|---|---|---|
| | New York, NEW YORK 10003<br>UNITED STATES<br>lofrumentos@coned.com | |
| Consolidated Edison Energy, Inc. | Norman Mah<br>Consolidated Edison Energy<br>CONSOLIDATED EDISON ENERGY, INC.<br>701 Westchester Ave<br>White Plains, NEW YORK 10604<br>UNITED STATES<br>mahn@conedcss.com | Rehan Gilani<br>100 Summit Lake Drive, Suite 410<br>Valhalla, NEW YORK 10595<br>gilanir@conedcss.com |
| Deepwater Wind, LLC | Jessica Friedman<br>Van Ness Feldman, LLP<br>1050 Thomas Jefferson St., N.W.<br>Seventh Floor<br>Washington, DISTRICT OF COLUMBIA 20007<br>UNITED STATES<br>jcf@vnf.com | David Schwartz<br>Commercial Director<br>Orsted North America Inc.<br>56 Exchange Ter Ste 300<br>Providence, RHODE ISLAND 02903-1772<br>dschw@orsted.com |
| Delaware Division of the Public Advocate | Regina Iorii<br>Deputy Attorney General<br>Delaware Department of Justice<br>820 N. French Street, 6th Floor<br>Wilmington, DELAWARE 19801<br>UNITED STATES<br>regina.iorii@state.de.us | Andrew C. Slater<br>Delaware Public Advocate<br>29 S. State Street<br>Dover, DELAWARE 19901<br>andrew.slater@delaware.gov |
| Delaware Division of the Public Advocate | | Ruth A. Price<br>Delaware Deputy Public Advocat<br>Delaware Public Advocate<br>820 North French Street, 4th Floor<br>Wiilmington, DELAWARE 19801<br>ruth.price@state.de.us |
| Delaware Division of the Public Advocate | | Andrea Maucher<br>Public Utilities Analyst<br>Delaware Division of the Public Advocate<br>29 South State Street<br>Dover, DELAWARE 19904<br>andrea.maucher@delaware.gov |
| Delaware Municipal Electric Corporation, Inc. | Thomas Rudebusch<br>Partner<br>Duncan, Weinberg, Genzer & Pembroke PC<br>1667 K Street, NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>tlr@dwgp.com | Roberta Rothschild<br>Legal Assistant<br>Duncan Weinberg Genzer & Pembroke, PC<br>1667 K Street NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>RR@dwgp.com |
| Delaware Municipal Electric Corporation, Inc. | Bhaveeta Mody<br>Duncan, Weinberg, Genzer & Pembroke PC<br>1667 K Street, N.W.<br>Suite 700<br>Washington, D.C., DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>bkm@dwgp.com | Patrick E McCullar<br>President and CEO<br>pmccullar@demecinc.net |
| Delaware Municipal Electric Corporation, Inc. | | Jay Kumar<br>Economics and Technical Consultants, Inc.<br>6241 Executive Blvd.<br>Rockville, MARYLAND 20852<br>jkumar@etcinc.biz |
| Direct Energy | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | |
| Direct Energy Business Marketing, LLC | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019 | |

| | | |
|---|---|---|
| | UNITED STATES<br>mphilips@lspower.com | |
| Direct Energy Business, LLC | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | |
| Dominion Energy Services, Inc. | Wesley Walker<br>Assistant General Counsel<br>Dominion Companies<br>PO Box 25615<br>Richmond,VIRGINIA 23260-5615<br>UNITED STATES<br>wesley.walker@dominionenergy.com | James G Davis<br>Electric Market Policy Consult<br>Dominion Energy & Dominion Generation<br>701 East Cary Street<br>OJRP 5th Floor<br>Richmond, VIRGINIA 23219<br>james.g.davis@dominionenergy.com |
| Duke Energy Corporation | Sheri May<br>Associate General Counsel<br>INDIVIDUAL<br>139 East Fourth St.<br>Cincinnati, OHIO 45202<br>UNITED STATES<br>sheri.may@duke-energy.com | |
| Dynegy Marketing and Trade, LLC | Amanda Frazier<br>Vistra Energy Corp.<br>1005 Congress Avenue, Suite 750<br>Austin, TEXAS 78701<br>UNITED STATES<br>Amanda.Frazier@vistraenergy.com | |
| East Kentucky Power Cooperative, Inc. | Daniel Frank<br>Partner<br>Eversheds Sutherland (US) LLP<br>700 Sixth Street NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20001-3980<br>UNITED STATES<br>DanielFrank@eversheds-sutherland.com | Chuck Dugan<br>Director, Federal and RTO Regu<br>East Kentucky Power Cooperative, Inc.<br>4775 Lexington Road<br>Winchester, KENTUCKY 40391<br>chuck.dugan@ekpc.coop |
| East Kentucky Power Cooperative, Inc. | Allison Speaker<br>Eversheds Sutherland (US) LLP<br>700 6th Street NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>AllisonSpeaker@eversheds-sutherland.com | |
| EDF Energy Services, LLC | Kenneth Irvin<br>Partner<br>Sidley Austin LLP<br>Sidley Austin LLP<br>1501 K St., NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>kirvin@sidley.com | Jason W Cox<br>Director, Regulatory Affairs<br>EDF Energy Services, LLC<br>4700 W Sam Houston Parkway North<br>Suite 250<br>Houston, TEXAS 77041<br>jason.cox@edfenergyservices.com |
| EDF Energy Services, LLC | | Terence T Healey<br>Partner<br>Sidley Austin LLP<br>60 State Street<br>34th Floor<br>Boston, MASSACHUSETTS 02109<br>thealey@sidley.com |
| EDF Trading North America, LLC | Kenneth Irvin<br>Partner<br>Sidley Austin LLP<br>Sidley Austin LLP<br>1501 K St., NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>kirvin@sidley.com | Jason W Cox<br>Director, Regulatory Affairs<br>EDF Energy Services, LLC<br>4700 W Sam Houston Parkway North<br>Suite 250<br>Houston, TEXAS 77041<br>jason.cox@edfenergyservices.com |

| | | |
|---|---|---|
| EDF Trading North America, LLC | | Terence T Healey<br>Partner<br>Sidley Austin LLP<br>60 State Street<br>34th Floor<br>Boston, MASSACHUSETTS 02109<br>thealey@sidley.com |
| EDP Renewables North America LLC | Jessica Friedman<br>Van Ness Feldman, LLP<br>1050 Thomas Jefferson St., N.W.<br>Seventh Floor<br>Washington, DISTRICT OF COLUMBIA 20007<br>UNITED STATES<br>jcf@vnf.com | Leslie Freiman<br>Horizon Wind Energy LLC<br>808 Travis<br>Suite 700<br>Houston, TEXAS 77002<br>leslie.freiman@edpr.com |
| Electric Power Supply Association | Nancy Bagot<br>Vice President<br>Electric Power Supply Association<br>1401 New York Ave. NW<br>11th FLoor<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>NancyB@epsa.org | |
| Electricity Consumers Resource Council | W. Richard Bidstrup<br>Cleary, Gottlieb, Steen & Hamilton LLP<br>2000 Pennsylvania Ave, NW<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>rbidstrup@cgsh.com | |
| Enel Companies (Enel Green Power North America, Inc. and EnerNOC, Inc.) | Katherine Guerry<br>EnerNOC, Inc.<br>one marina park drive<br>Boston, MASSACHUSETTS 02110<br>UNITED STATES<br>kguerry@enernoc.com | Brian Kauffman<br>Manager of Regulatory Affairs<br>One Marina Park Drive, Suite 400<br>Boston, MASSACHUSETTS 02210<br>brian.kauffman@enel.com |
| Enel Companies (Enel Green Power North America, Inc. and EnerNOC, Inc.) | | Kate McKeever<br>Director of Regulatory and Ins<br>Enel Green Power North America, Inc.<br>100 Brickstone Square<br>Suite 300<br>Andover, MASSACHUSETTS 01810<br>kate.mckeever@enel.com |
| Enel Companies (Enel Green Power North America, Inc. and EnerNOC, Inc.) | | John F Thirolf<br>Asso Vice President, Regulator<br>Enel Green Power North America, Inc.<br>816 Connecticut Avenue NW<br>Suite 1100<br>Washington, DISTRICT OF COLUMBIA 20006<br>jack.thirolf@enel.com |
| Energy Capital Partners IV, LLC | Andrew Gilbert<br>agilbert@ecpartners.com | Jim Ginnetti<br>jim@jimginnetticonsultingllc.com |
| Energy Storage Association | Andrew Kaplan<br>Pierce Atwood LLP<br>100 Summer Street<br>Boston, MASSACHUSETTS 02110<br>UNITED STATES<br>akaplan@pierceatwood.com | |
| Enerwise Global Technologies, Inc. | Gregory Lawrence<br>Partner<br>Greenberg Traurig, LLP<br>One International Place<br>Boston, MASSACHUSETTS 02110<br>UNITED STATES<br>lawrenceg@gtlaw.com | |
| ENVIRONMENTAL DEFENSE FUND | Kim Smaczniak<br>EARTHJUSTICE<br>1625 Massachusetts Avenue NW | Michael Panfil<br>Attorney<br>ENVIRONMENTAL DEFENSE FUND |

| | | |
|---|---|---|
| | Suite 702<br>Washington, DISTRICT OF COLUMBIA 20036<br>UNITED STATES<br>ksmaczniak@earthjustice.org | 1875 Connecticut Ave NW, Ste 600<br>Washington, DISTRICT OF COLUMBIA 20009<br>mpanfil@edf.org |
| Exelon Corporation | Christopher Wilson<br>Director, Federal Regulatory A<br>Exelon Corporation<br>101 Constitution Ave, NW<br>Suite 400E<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>FERCe-filings@exeloncorp.com | Carrie H Allen<br>Assistant General Counsel<br>Exelon Corporation<br>101 Constitution Ave. NW Suite 400 East<br>Washington, DISTRICT OF COLUMBIA 20001<br>carrie.allen@exeloncorp.com |
| Exelon Corporation | | Jason C Barker, ESQ<br>Vice President, Energy Policy<br>Constellation Energy Group Inc.<br>111 Market Place<br>Suite 500<br>Baltimore, MARYLAND 21202<br>jason.barker@constellation.com |
| FirstEnergy Service Company | Evan Dean<br>Attorney<br>FirstEnergy<br>76 S. Main St.<br>Akron, OHIO 44224<br>UNITED STATES<br>edean@firstenergycorp.com | Morgan Parke ESQ<br>Attorney<br>FirstEnergy<br>76 South Main Street<br>Akron, OHIO 44308-1890<br>mparke@firstenergycorp.com |
| FirstEnergy Service Company | | Sharon Noewer<br>slnoewer@firstenergycorp.com |
| FirstEnergy Solutions Corp. | George Cannon<br>Akin Gump Strauss Hauer & Feld LLP<br>1333 New Hampshire Ave. NW<br>Washington, DISTRICT OF COLUMBIA 20036<br>UNITED STATES<br>ccannon@akingump.com | |
| FirstEnergy Solutions Corp. | Todd Brecher<br>Akin Gump Strauss Hauer & Feld LLP<br>1333 New Hampshire Avenue NW<br>Washington, DISTRICT OF COLUMBIA 20036<br>UNITED STATES<br>tbrecher@akingump.com | |
| FirstEnergy Solutions Corp. | John White<br>Akin Gump Strauss Hauer & Feld, LLP<br>1333 New Hampshire Avenue NW<br>Washington, DISTRICT OF COLUMBIA 20009<br>UNITED STATES<br>whitej@akingump.com | |
| Governors' Wind & Solar Energy Coalition | Larry Pearce<br>Executive Director<br>2200 Wilson Blvd, ste 102-22<br>Arlington, VIRGINIA 22201<br>UNITED STATES<br>larry@governorscoalition.org | Larry Pearce<br>Executive Director<br>2200 Wilson Blvd, ste 102-22<br>Arlington, VIRGINIA 22201<br>larry@governorscoalition.org |
| Great Bay Solar I, LLC | Sarah Knowlton<br>General Counsel<br>116 North Main Street<br>Concord, NEW HAMPSHIRE 03301<br>UNITED STATES<br>sarah.knowlton@libertyutilities.com | Patrick Taylor<br>Patrick.Taylor@algonquinpower.com |
| GSG 6, LLC | Sarah Knowlton<br>General Counsel<br>116 North Main Street<br>Concord, NEW HAMPSHIRE 03301<br>UNITED STATES | Patrick Taylor<br>Patrick.Taylor@algonquinpower.com |

| | | |
|---|---|---|
| | sarah.knowlton@libertyutilities.com | |
| H-P Energy Resources LLC | Stephen Huntoon<br>Energy Counsel, LLP<br>1629 K Street, N.W., Suite 300<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>huntoon@comcast.net | Robert John Patrylo<br>President<br>H-P Energy Resources LLC<br>626 Creek Lane<br>Flourtown, PENNSYLVANIA 19031<br>rpatrylo@comcast.net |
| Illinois Attorney General's Office | | Susan L. Satter<br>Senior Assistant Attorney Gene<br>Illinois Office of Attorney General<br>100 West Randolph Street<br>11th Floor<br>Chicago, ILLINOIS 60601<br>ssatter@atg.state.il.us |
| Illinois Citizens Utility Board | Kristin Munsch<br>Attorney<br>Illinois Citizens Utility Board<br>309 W. Washington St. Ste. 800<br>Chicago, ILLINOIS 60202<br>UNITED STATES<br>kmunsch@citizensutilityboard.org | |
| Illinois Commerce Commission | Christine Ericson<br>Special Assistant Attorney Gen<br>Illinois Commerce Commission<br>160 N. LaSalle St.<br>Suite C-800<br>Chicago, ILLINOIS 60601<br>UNITED STATES<br>Christine.Ericson@illinois.gov | Randy Rismiller<br>Assistant Director, Policy<br>Illinois Commerce Commission<br>527 East Capitol Avenue<br>Springfield, ILLINOIS 62701<br>Randy.Rismiller@illinois.gov |
| Illinois Commerce Commission | | William VanderLaan<br>bill.vanderlaan@illinois.gov |
| Illinois Industrial Energy Consumers | Eric Robertson<br>INDIVIDUAL<br>1939 Delmar Avenue<br>P. O. Box 735<br>Granite City, ILLINOIS 62040<br>UNITED STATES<br>erobertson@lrklaw.com | Ryan Robertson<br>Attorney<br>Lueders, Robertson & Konzen<br>PO Box 735<br>Granite City,ILLINOIS 62040-0735<br>ryrobertson@lrklaw.com |
| Illinois Municipal Electric Agency | | Troy A Fodor<br>Illinois Municipal Electric Agency<br>3400 Conifer Drive<br>Springfield, ILLINOIS 62711<br>tfodor@imea.org |
| Indiana Utility Regulatory Commission | Beth Heline<br>General Counsel<br>Indiana Utility Regulatory Commission<br>Suite 1500 East<br>101 West Washington Street<br>Indianapolis, INDIANA 46204<br>UNITED STATES<br>BHeline@urc.in.gov | Jeremy Comeau<br>Indiana Utility Regulatory Com<br>Indiana Utility Regulatory Commission<br>101 W. Washington St.<br>Suite 1500 E.<br>Indianapolis, INDIANA 46204<br>jcomeau@urc.in.gov |
| Indicated New York Transmission Owners | Elias Farrah<br>Attorney<br>Winston & Strawn LLP<br>9416 Wing Foot Court<br>Potomac, MARYLAND 20854<br>UNITED STATES<br>efarrah@tred-llc.com | Zachary B. Cohen<br>1700 K St. NW<br>Washington, DISTRICT OF COLUMBIA 20006<br>zcohen@winston.com |
| Industrial Energy Consumers of Pennsylvania | Barry Naum<br>Spilman Thomas & Battle, PLLC<br>1100 Bent Creek Boulevard<br>Suite 101<br>Mechanicsburg, PENNSYLVANIA 17050<br>UNITED STATES<br>bnaum@spilmanlaw.com | |

| | | |
|---|---|---|
| Industrial Energy Users-Ohio | | Robert A Weishaar, JR<br>McNees Wallace & Nurick LLC<br>1200 G Street, NW<br>Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>bweishaar@mcneeslaw.com |
| Institute for Policy Integrity, New York University School of Law | Avi Zevin<br>Institute for Policy Integrity, New York University School of Law<br>139 MacDougal St.<br>Room 319<br>New York, NEW YORK 10012<br>UNITED STATES<br>avi.zevin@nyu.edu | |
| J-POWER USA Development Co., Ltd. | Matthew Keenan<br>J-POWER USA Development Co. Ltd.<br>1900 East Golf Rd, Ste. 1030<br>Schaumburg, ILLINOIS 60173<br>UNITED STATES<br>mkeenan@jpowerusa.com | |
| Kentucky Attorney General | Kent Chandler<br>Executive Staff Advisor<br>Kentucky Public Service Commission<br>211 Sower Blvd.<br>Frankfort, KENTUCKY 40601<br>UNITED STATES<br>kent.chandler@ky.gov | Larry Cook<br>Kentucky Attorney General<br>700 Capitol Ave.<br>Frankfort, KENTUCKY 40601<br>larry.cook@ky.gov |
| Kentucky Attorney General | | Justin M. McNeil<br>Assistant Attorney General<br>Attorney General of Kentucky<br>700 Capitol Ave, Suite 20<br>Frankfort, KENTUCKY 40511<br>Justin.McNeil@ky.gov |
| Kentucky Attorney General | | Rebecca W Goodman, ESQ<br>Exec. Dir. Rate Intervention,<br>KY Office of Attorney General<br>1024 Capital Center Drive<br>Frankfort, KENTUCKY 40601<br>Rebecca.Goodman@ky.gov |
| Lightstone Generation LLC | Brooksany Barrowes<br>Baker Botts LLP<br>1301 Pennsylvania Avenue, N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>brooksany.barrowes@kirkland.com | |
| Long Island Lighting Company d/b/a Power Supply Long Island, , a wholly-owned subsidiary of the Long Island Power Authority (collectively, LIPA) | Joseph Nelson<br>Member<br>Van Ness Feldman, LLP<br>1050 Thomas Jefferson St, NW; Ste 700<br>Washington, DISTRICT OF COLUMBIA 20007<br>UNITED STATES<br>jbn@vnf.com | Darshana Singh<br>Attorney<br>Van Ness Feldman LLP<br>1050 Thomas Jefferson Street, NW<br>Washington, DISTRICT OF COLUMBIA 20007<br>dxs@vnf.com |
| Longroad Development Company, LLC | Larry Eisenstat<br>Partner<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave. N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>leisenstat@crowell.com | Patricia M Alexander<br>Advisor<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave. N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>palexander@crowell.com |
| Longroad Development Company, LLC | | Diana Jeschke<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave NW<br>Washington, DISTRICT OF COLUMBIA 20004 |

| | | |
|---|---|---|
| | | djeschke@crowell.com |
| Longroad Development Company, LLC | | Vanessa Kwong<br>Counsel<br>Longroad Energy Management, LLC<br>735 Montgomery Street<br>Suite 480<br>San Francisco, CALIFORNIA 94111<br>vanessa.kwong@longroadenergy.com |
| LS Power Associates, L.P. | Tom Hoatson<br>1 Tower Center<br>East Brunswick, NEW JERSEY 08816<br>UNITED STATES<br>thoatson@lspower.com | |
| LS Power Associates, L.P. | Neil Levy<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>nlevy@mwe.com | |
| LS Power Associates, L.P. | Neil Levy<br>McDermott Will & Emery LLP<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>nlevy@mwe.com | |
| Maryland Energy Administration | Ankush Nayar<br>Assistant Attorney General - M<br>Maryland Energy Administration<br>1800 Washington Blvd<br>Suite 755<br>Baltimore, MARYLAND 21230<br>UNITED STATES<br>ankush.nayar1@maryland.gov | |
| Maryland Public Service Commission | Miles Mitchell<br>Deputy General Counsel<br>Maryland Public Service Commission<br>6 St. Paul Street<br>16th Floor, William Donald Schaefer Tower<br>Baltimore, MARYLAND 21202<br>UNITED STATES<br>miles.mitchell@maryland.gov | |
| Michigan Attorney General | Michael Moody<br>Michigan Attorney General<br>Michigan Attorney General<br>525 West Ottawa<br>Lansing, MICHIGAN 48909<br>UNITED STATES<br>moodym2@michigan.gov | |
| Microgrid Resources Coalition | Christopher Berendt<br>Partner<br>Faegre Drinker Biddle & Reath LLP<br>1500 K Street NW<br>Washington DC, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>christopher.berendt@faegredrinker.com | Emily J Maus<br>Associate<br>DRINKER, BIDDLE & REATH<br>1500 K St NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>emily.maus@dbr.com |
| Minonk Wind, LLC | Sarah Knowlton<br>General Counsel<br>116 North Main Street<br>Concord, NEW HAMPSHIRE 03301<br>UNITED STATES<br>sarah.knowlton@libertyutilities.com | Patrick Taylor<br>Patrick.Taylor@algonquinpower.com |
| Monitoring Analytics, LLC | Jeffrey Mayes<br>General Counsel<br>Monitoring Analytics, LLC<br>2621 Van Buren Avenue, Suite 160<br>Valley Forge Corporate Center<br>Eagleville, PENNSYLVANIA 19403 | Suzette N Krausen<br>Executive Assistant<br>Monitoring Analytics, LLC<br>2621 Van Buren Ave Ste 160<br>Norristown, PENNSYLVANIA 19403<br>Suzette.Krausen@monitoringanalytics.com |

| | | |
|---|---|---|
| | UNITED STATES<br>jeffrey.mayes@monitoringanalytics.com | |
| Monitoring Analytics, LLC | | Joseph Bowring<br>Monitoring Analytics, LLC<br>2621 Van Buren Avenue, Suite 160<br>Norristown, PENNSYLVANIA 19403<br>Joseph.Bowring@monitoringanalytics.com |
| National Mining Association | Bruce Watzman<br>Sr. VP<br>101 Constitution Avenue, NW<br>Suite 500 East<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>bwatzman@nma.org | |
| National Rural Electric Cooperative Association | Randolph Elliott<br>Partner<br>National Rural Electric Cooperative Association<br>1301 K Street N.W.<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>relliott@mccarter.com | Adrienne E Clair<br>Thompson Coburn LLP<br>Thompson Coburn LLP<br>1909 K Street NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006<br>aclair@thompsoncoburn.com |
| NATURAL RESOURCES DEFENSE COUNCIL | Tom Rutigliano<br>Sr. Advocate<br>NATURAL RESOURCES DEFENSE COUNCIL<br>1124 15th St. NW<br>Suite 300<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>trutigliano@nrdc.org | |
| New Jersey Board of Public Utilities | Alex Moreau<br>Deputy Attorney General<br>State of New Jersey, Law & Public Safety, Division of Law<br>Law & Public Safety, Division of Law, 124 Halsey Street<br>P.O. Box 45029<br>Newark, NEW JERSEY 07101<br>UNITED STATES<br>Alex.Moreau@law.njoag.gov | |
| New Jersey Board of Public Utilities | | Cynthia Holland<br>New Jersey Board of Public Utilities<br>44 South Clinton Avenue<br>Trenton, NEW JERSEY 08625-0350<br>Cynthia.Holland@bpu.nj.gov |
| New Jersey Board of Public Utilities | | Zainab Nawaz<br>FERC Specialist<br>New Jersey Board of Public Utilities<br>44 South Clinton Ave<br>Trenton, NEW JERSEY 08625<br>zainab.nawaz@bpu.nj.gov |
| New Jersey Board of Public Utilities | | Joseph DeLosa, III<br>FERC Specialist<br>New Jersey Board of Public Utilities<br>44 S. Clinton Ave<br>Trenton, NEW JERSEY 08609<br>joseph.delosa@bpu.nj.gov |
| New Jersey Board of Public Utilities | Paul Youchak<br>Attorney General of the State of New Jersey<br>25 Market Street<br>Trenton, NEW JERSEY 08611<br>UNITED STATES<br>paul.youchak@law.njoag.gov | Pamela L Owen, ESQ<br>Attorney General of the State of New Jersey<br>pamela.owen@law.njoag.gov |
| New Jersey Board of Public Utilities | Paul Youchak<br>New Jersey Department of Law and Public Safety | Joseph DeLosa, III<br>FERC Specialist<br>New Jersey Board of Public Utilities |

| | | |
|---|---|---|
| | 25 Market Street<br>Trenton, NEW JERSEY 08611<br>UNITED STATES<br>paul.youchak@law.njoag.gov | 44 S. Clinton Ave<br>Trenton, NEW JERSEY 08609<br>joseph.delosa@bpu.nj.gov |
| New Jersey Board of Public Utilities | Cynthia Holland<br>New Jersey Board of Public Utilities<br>44 South Clinton Avenue<br>Trenton, NEW JERSEY 08625-0350<br>UNITED STATES<br>Cynthia.Holland@bpu.nj.gov | Emily Smithman<br>Emily.Smithman@bpu.nj.gov |
| New York Power Authority | Glenn Haake<br>Principal Attorney<br>New York Power Authority<br>30 South Pearl Street<br>Albany, NEW YORK 12207<br>UNITED STATES<br>Glenn.Haake@nypa.gov | |
| New York State Electric & Gas Corporation | Justin Atkins<br>Regulatory Counsel<br>Avangrid Service Company<br>One City Center 5th Floor<br>Portland, MAINE 04101<br>UNITED STATES<br>justin.atkins@avangrid.com | |
| Niagara Mohawk d/b/a/ National Grid | David Lodemore<br>Senior Counsel, National Grid<br>National Grid USA<br>40 Sylvan Road<br>Waltham, MASSACHUSETTS 02451<br>UNITED STATES<br>david.lodemore@nationalgrid.com | |
| North Carolina Electric Membership Corporation | Richard Feathers<br>North Carolina Electric Membership Corporation<br>PO Box 27306<br>Select or enter,NORTH CAROLINA 27611-7306<br>UNITED STATES<br>rick.feathers@ncemcs.com | Brenda Lynam<br>Legal<br>North Carolina Electric Membership Corporation<br>PO Box 27306<br>Raleigh,NORTH CAROLINA 27611-7306<br>brenda.lynam@ncemcs.com |
| North Carolina Electric Membership Corporation | Charles Bayless<br>Associate General Counsel<br>North Carolina Electric Membership Corporation<br>3400 Sumner Boulevard<br>Raleigh, NORTH CAROLINA 27616<br>UNITED STATES<br>charlie.bayless@ncemcs.com | |
| North Carolina Electric Membership Corporation | Sean Beeny<br>Attorney<br>INDIVIDUAL<br>1301 K Street N.W.<br>Suite 1000 West<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>sbeeny@mccarter.com | |
| North Carolina Electric Membership Corporation | Denise Goulet<br>Partner<br>McCarter & English, LLP<br>1301 K Street, N.W.<br>Suite 1000 West<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>dgoulet@mccarter.com | |
| Northern Virginia Electric Cooperative, Inc. | Alan Robbins<br>Member<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street NW | Patrick Toulme<br>Northern Virginia Electric Cooperative,<br>10323 Lomond Drive<br>Manassas, VIRGINIA 20109 |

| | | |
|---|---|---|
| | Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>arobbins@jsslaw.com | ptoulme@novec.com |
| Northern Virginia Electric Cooperative, Inc. | Debra Roby<br>Member<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street NW<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>droby@jsslaw.com | Robert Bisson<br>10323 Lomond Drive<br>P.O. Box 2710<br>Manassas, VIRGINIA 20108<br>RBisson@NOVEC.com |
| Northern Virginia Electric Cooperative, Inc. | Andrea Sarmentero<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street NW<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>asarmentero@jsslaw.com | Michael J. Dailey<br>Northern Virginia Electric Cooperative,<br>10323 Lomond Drive<br>Manassas, VIRGINIA 20109<br>mdailey@novec.com |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Abraham Silverman<br>Assistant General Counsel - Re<br>NRG Energy, Inc.<br>211 Carnegie Center Drive<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>abe.silverman@nrg.com | Neal Fitch<br>Dir. East Regulatory Affairs<br>NRG Energy, Inc.<br>211 Carnegie Center<br>Princeton, NEW JERSEY 08540<br>neal.fitch@nrgenergy.com |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Cortney Slager<br>Assistant General Counsel - Re<br>NRG Companies<br>804 Carnegie Center<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>cortney.slager@nrg.com | |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Jennifer Hsia<br>NRG Energy<br>211 Carnegie Center<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>jennifer.hsia@nrg.com | |
| NUCLEAR ENERGY INSTITUTE | Jonathan Rund<br>Associate General Counsel<br>NUCLEAR ENERGY INSTITUTE<br>Nuclear Energy Institute<br>1201 F Street, NW, Suite 1100<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>jmr@nei.org | |
| Office of the Attorney General for the District of Columbia | Sarah Kogel-Smucker<br>Special Assistant Corporation<br>Office of the Attorney General for the District of Columbia<br>441 4th Street NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>sarah.kogel-smucker@dc.gov | |
| Office of the Attorney General of Maryland | Steven Goldstein<br>Special Assistant Attorney Gen<br>Office of the Attorney General of Maryland<br>200 Saint Paul Place<br>20th Floor<br>Baltimore, MARYLAND 21202<br>UNITED STATES<br>sgoldstein@oag.state.md.us | |

| | | |
|---|---|---|
| Office of the People's Counsel for the District of Columbia | Sandra Mattavous-Frye<br>Deputy People's Counsel<br>smfrye@opc-dc.gov | Dwayne C Houston<br>Litigation Assistant<br>Office of the People's Counsel for the District of Columbia<br>1133 15th Street, NW<br>Suite 500<br>Washington, DISTRICT OF COLUMBIA 20005<br>dhouston@opc-dc.gov |
| Ohio Consumers' Counsel | Bryce McKenney<br>Ohio Consumers' Counsel<br>65 East State Street<br>7th Floor<br>Columbus, OHIO 43209<br>UNITED STATES<br>bryce.mckenney@occ.ohio.gov | |
| Ohio Manufacturers' Association Energy Group | Brian Dressel<br>Carpenter Lipps & Leland LLP<br>280 North High Street<br>Suite 1300<br>Columbus, OHIO 43215<br>UNITED STATES<br>dressel@carpenterlipps.com | |
| Ohio Manufacturers' Association Energy Group | Kimberly Bojko<br>Attorney<br>Carpenter Lipps & Leland LLP<br>280 N High Street, Suite 1300<br>Columbus, OHIO 43215<br>UNITED STATES<br>bojko@carpenterlipps.com | |
| Old Dominion Electric Cooperative | Adrienne Clair<br>Thompson Coburn LLP<br>Thompson Coburn LLP<br>1909 K Street NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>aclair@thompsoncoburn.com | Kayla Grant<br>Thompson Coburn LLP<br>1909 K Street NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006<br>kgrant@thompsoncoburn.com |
| Olympus Power, LLC | Sean Lane<br>EVP-Government Affairs<br>67 park place east<br>4th floor<br>morristown, NEW JERSEY 07960<br>UNITED STATES<br>slane@olympuspower.com | William D DeGrandis<br>Partner<br>Paul Hastings LLP<br>875 15TH STREET, NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>billdegrandis@paulhastings.com |
| Olympus Power, LLC | | Jenna McGrath<br>Associate<br>Paul Hastings LLP<br>875 15th Street, N.W.<br>Washington, DISTRICT OF COLUMBIA 20005<br>jennamcgrath@paulhastings.com |
| Orange and Rockland Utilities, Inc. | Susan LoFrumento<br>Associate Counsel<br>Consolidated Edison Company of New York, Inc.<br>4 Irving Place<br>New York, NEW YORK 10003<br>UNITED STATES<br>lofrumentos@coned.com | |
| Organization of PJM States, Inc. | Gregory Carmean<br>Executive Director<br>Organization of PJM States, Inc.<br>249 East Main Street<br>Newark, DELAWARE 19711<br>UNITED STATES<br>greg@opsi.us | |
| Panda Power Generation Infrastructure | Robert O'Connell<br>Director, Regulatory Affairs<br>Panda Power Funds | |

| | | |
|---|---|---|
| Fund, LLC | 1033 Squires Drive<br>West Chester, PENNSYLVANIA 19382<br>UNITED STATES<br>boconnell@pandafunds.com | |
| Pennsylvania Coal Alliance | Rachel Gleason<br>Executive Director<br>Pennsylvania Coal Alliance<br>212 North Third Street<br>Suite 203<br>Harrisburg, PENNSYLVANIA 17101<br>UNITED STATES<br>gleason@pacoal.org | |
| Pennsylvania Energy Consumer Alliance | Pamela Polacek<br>McNees Wallace & Nurick LLC<br>PO Box 1166<br>Harrisburg,PENNSYLVANIA 17108-1166<br>UNITED STATES<br>ppolacek@mwn.com | Kenneth R Stark<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>kstark@mcneeslaw.com |
| Pennsylvania Public Utility Commission | Aspassia Staevska<br>Assistant Counsel<br>Pennsylvania Public Utility Commission<br>400 North Street<br>Harrisburg, PENNSYLVANIA 17120<br>UNITED STATES<br>astaevska@pa.gov | |
| PJM Industrial Customer Coalition | Robert Weishaar<br>McNees Wallace & Nurick LLC<br>1200 G Street, NW<br>Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>bweishaar@mcneeslaw.com | Susan E Bruce<br>McNees Wallace & Nurick LLC<br>100 Pine St<br>Harrisburg, PENNSYLVANIA 17101<br>sbruce@mcneeslaw.com |
| PJM Industrial Customer Coalition | | Kenneth R Stark<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>kstark@mcneeslaw.com |
| PJM Industrial Customer Coalition | | David S. Mabry<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>dmabry@mwn.com |
| PJM Industrial Customer Coalition | | Lauren Huff<br>Paralegal<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>P.O. Box 1166<br>Harrisburg, PENNSYLVANIA 17108<br>lhuff@mwn.com |
| PJM Interconnection, L.L.C. | Chenchao Lu<br>Counsel<br>PJM Interconnection, L.L.C.<br>2750 Monroe Blvd.<br>Audubon, PENNSYLVANIA 19403<br>UNITED STATES<br>chenchao.lu@pjm.com | Jennifer H Tribulski, ESQ<br>Senior Counsel<br>PJM Interconnection, L.L.C.<br>2750 Monroe Boulevard<br>Audubon, PENNSYLVANIA 19403<br>jennifer.tribulski@pjm.com |
| PJM Interconnection, L.L.C. | | CRAIG GLAZER<br>V.P., Federal Gov't Policy<br>PJM Interconnection, L.L.C.<br>1200 G Street, N.W.<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>CRAIG.GLAZER@PJM.COM |
| PJM Interconnection, L.L.C. | Paul Flynn<br>PJM Interconnection, L.L.C.<br>1200 G St. NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA | |

| | | |
|---|---|---|
| | 20005<br>UNITED STATES<br>flynn@wrightlaw.com | |
| PJM Interconnection, L.L.C. | Ryan Collins<br>Attorney<br>PJM Interconnection, L.L.C.<br>1200 G Street, N.W., Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>collins@wrightlaw.com | |
| PJM Power Providers Group | Glen Thomas<br>1060 First Avenue<br>Suite 400<br>King of Prussia, PENNSYLVANIA 19406<br>UNITED STATES<br>gthomas@gtpowergroup.com | Diane L Slifer<br>1060 First Avenue<br>Suite 400<br>King of Prussia, PENNSYLVANIA 19406<br>dslifer@gtpowergroup.com |
| PJM Power Providers Group | | Laura Chappelle<br>4218 Jacob Meadows<br>Okemos, MICHIGAN 48864<br>laurac@chappelleconsulting.net |
| Potomac Economics, Ltd. | David Patton<br>Potomac Economics<br>9990 Fairfax Blvd<br>Suite 560<br>Fairfax, VIRGINIA 22030<br>UNITED STATES<br>dpatton@potomaceconomics.com | |
| PUBLIC CITIZEN, INC | Tyson Slocum<br>Director<br>Public Citizen's Energy Program<br>215 Pennsylvania Ave SE<br>Washington, DISTRICT OF COLUMBIA 20003<br>UNITED STATES<br>tslocum@citizen.org | |
| Public Service Commission of Kentucky | Richard Raff<br>richard.raff@ky.gov | Quang D Nguyen<br>Staff Counsel<br>Kentucky Public Service Commission<br>211 Sower Boulevard<br>Frankfort, KENTUCKY 40602<br>quangd.nguyen@ky.gov |
| Public Service Commission of the District of Columbia | Craig Berry<br>Attorney Advisor<br>Public Service Commission of the District of Columbia<br>1325 G Street, N.W., Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>cberry@psc.dc.gov | Craig W. Berry, ESQ<br>Attorney Advisor<br>Public Service Commission of the District of Columbia<br>1325 G Street, N.W., Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>cberry@psc.dc.gov |
| Public Service Commission of the District of Columbia | | Kenneth L Glick<br>Attorney Advisor<br>D.C. Public Service Commission<br>1325 G Street, NW<br>Sixth Floor<br>Washington, D.C., DISTRICT OF COLUMBIA 20005<br>kglick@psc.dc.gov |
| Public Service Commission of West Virginia | Robert Adkins<br>Law Clerk<br>Public Service Commission of West Virginia<br>201 Brooks Street<br>Charleston, WEST VIRGINIA 25526<br>UNITED STATES<br>radkins@psc.state.wv.us | |
| Public Utilities Commission of Ohio | Thomas McNamee<br>Assistant Attorney General<br>Ohio Public Utilities Commission | |

| | | |
|---|---|---|
| | 30 East Broad Street<br>16th fl<br>Columbus, OHIO 43215<br>UNITED STATES<br>thomas.mcnamee@ohioattorneygeneral.gov | |
| Rochester Gas and Electric Corporation | Justin Atkins<br>Regulatory Counsel<br>Avangrid Service Company<br>One City Center 5th Floor<br>Portland, MAINE 04101<br>UNITED STATES<br>justin.atkins@avangrid.com | |
| Rockland Capital | Travis Stewart<br>Associate<br>GABEL ASSOCIATES<br>417 Denison Street<br>Highland Park, NEW JERSEY 08904<br>UNITED STATES<br>travis.stewart@gabelassociates.com | Scott Harlan<br>Rockland Capital<br>24 Waterway Avenue<br>Suite 800<br>The Woodlands, TEXAS 77380<br>scott.harlan@rocklandcapital.com |
| Rockland Electric Company | Margaret Comes<br>Senior Attorney<br>Consolidated Edison Company of New York, Inc.<br>4 Irving Place - Room 1815-S<br>New York, NEW YORK 10003<br>UNITED STATES<br>comesm@coned.com | Brian L Wilkie<br>Project Specialist<br>Consolidated Edison Company of New York, Inc.<br>Consolidated Edison Company of New York, Inc.<br>4 Irving Place, NEW YORK 10003<br>wilkieb@coned.com |
| Sabin Center for Climate Change Law | Romany Webb<br>Sabin Center for Climate Change Law<br>Columbia Law School<br>435 W 116th St<br>New York City, NEW YORK 10027<br>UNITED STATES<br>rwebb@law.columbia.edu | |
| Sandy Ridge Wind, LLC | Sarah Knowlton<br>General Counsel<br>116 North Main Street<br>Concord, NEW HAMPSHIRE 03301<br>UNITED STATES<br>sarah.knowlton@libertyutilities.com | Patrick Taylor<br>Patrick.Taylor@algonquinpower.com |
| Sierra Club | Kim Smaczniak<br>EARTHJUSTICE<br>1625 Massachusetts Avenue NW<br>Suite 702<br>Washington, DISTRICT OF COLUMBIA 20036<br>UNITED STATES<br>ksmaczniak@earthjustice.org | Casey Roberts<br>Senior Attorney<br>Sierra Club<br>1536 Wynkoop St, Suite 200<br>Denver, COLORADO 80202<br>casey.roberts@sierraclub.org |
| Southern Maryland Electric Cooperative, Inc. | John Rohrbach<br>ACES POWER MARKETING<br>4140 West 99th Street<br>Carmel, INDIANA 46032<br>UNITED STATES<br>JRohrbach@acespower.com | Eugene Bradford<br>Vice President, Rates and Ener<br>SOUTHERN MARYLAND ELECTRIC COOP INC<br>15035 Burnt Store Rd.<br>Hughesville, MARYLAND 20637<br>Eugene.Bradford@smeco.coop |
| Southern Maryland Electric Cooperative, Inc. | | Mark MacDougall<br>Senior Vice President and Gene<br>Southern Maryland Electric Cooperative, Inc.<br>PO Box 1937<br>Hughesville, 20637-1937<br>mark.macdougall@smeco.coop |
| Southern Maryland Electric Cooperative, Inc. | | John Rohrbach<br>ACES POWER MARKETING<br>4140 West 99th Street<br>Carmel, INDIANA 46032<br>JRohrbach@acespower.com |
| Starwood Energy Group Global, L.L.C. | Jonathan Gottlieb<br>Partner<br>Eversheds Sutherland (US) LLP<br>700 Sixth Street, NW, Suite 700 | Jeffrey Delgado<br>Senior Vice President<br>Starwood Energy Group Global, LLC<br>5 Greenwich Office Park |

| | | |
|---|---|---|
| | Washington, DISTRICT OF COLUMBIA 20001-3980<br>UNITED STATES<br>JonathanGottlieb@eversheds-sutherland.com | Greenwich, CONNECTICUT 06831<br>jdelgado@starwood.com |
| Steel Producers | Damon Xenopoulos<br>Principal<br>Stone Mattheis Xenopoulos & Brew, PC<br>1025 Thomas Jefferson Street NW<br>WASHINGTON, DISTRICT OF COLUMBIA 20007<br>UNITED STATES<br>dex@smxblaw.com | Shaun C Mohler, ESQ<br>Shaun C. Mohler, Esq.<br>Stone Mattheis Xenopoulos & Brew, PC<br>1025 Thomas Jefferson Street, NW<br>8th Floor, West Tower<br>Washington, DISTRICT OF COLUMBIA 20007<br>shaun.mohler@smxblaw.com |
| Sustainable FERC Project | John Moore<br>Senior Attorney<br>Sustainable FERC Project<br>2 N Riverside Plz Ste 2250<br>RTS-RETURN TO SENDER<br>Chicago, ILLINOIS 60606-2640<br>UNITED STATES<br>moore.fercproject@gmail.com | |
| Talen Energy Marketing, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Tenaska Inc. | Bradley Heisey<br>Senior Vice President<br>Tenaska Inc.<br>14302 FNB Parkway<br>Omaha, NEBRASKA 68154<br>UNITED STATES<br>bheisey@tenaska.com | Drew J. Fossum<br>VP and General Counsel<br>Tenaska Marketing Ventures<br>11718 Nicholas Street<br>Omaha, NEBRASKA 68154<br>dfossum@tenaska.com |
| The AES Corporation | Randall Griffin<br>Chief Regulatory Counsel<br>Dayton Power and Light Company, The<br>1065 Woodman Drive<br>Dayton, OHIO 45432<br>UNITED STATES<br>randall.griffin@aes.com | John W Horstmann<br>Dayton Power and Light Company, The<br>315 Buckwalter Rd<br>Phoenixville, PENNSYLVANIA 19460<br>john.horstmann@aes.com |
| The Dayton Power and Light Company | Randall Griffin<br>Chief Regulatory Counsel<br>Dayton Power and Light Company, The<br>1065 Woodman Drive<br>Dayton, OHIO 45432<br>UNITED STATES<br>randall.griffin@aes.com | John W Horstmann<br>Dayton Power and Light Company, The<br>315 Buckwalter Rd<br>Phoenixville, PENNSYLVANIA 19460<br>john.horstmann@aes.com |
| The Hershey Company | Pamela Polacek<br>McNees Wallace & Nurick LLC<br>PO Box 1166<br>Harrisburg,PENNSYLVANIA 17108-1166<br>UNITED STATES<br>ppolacek@mwn.com | |
| UNION OF CONCERNED SCIENTISTS | Michael Jacobs<br>Sr. Energy Analyst<br>UNION OF CONCERNED SCIENTISTS<br>2 Brattle Square<br>Cambridge, MASSACHUSETTS 02138<br>UNITED STATES<br>mjacobs@ucsusa.org | |
| Vistra Energy Corp. | Amanda Frazier<br>Vistra Energy Corp.<br>1005 Congress Avenue, Suite 750<br>Austin, TEXAS 78701<br>UNITED STATES<br>Amanda.Frazier@vistraenergy.com | |

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Service List for ER18-1314-000 PJM Interconnection, L.L.C.

Contacts marked ** must be postal served

| Party | Primary Person or Counsel of Record to be Served | Other Contact to be Served |
|---|---|---|
| Advanced Energy Management Alliance | Katherine Hamilton<br>Principal<br>1200 18th Street, NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20036<br>UNITED STATES<br>katherine@38northsolutions.com | Katherine H Hamilton<br>Principal<br>1200 18th Street, NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20036<br>katherine@38northsolutions.com |
| Affirmed Energy LLC | Angela Fox<br>112 S Duke Street<br>Suite 1<br>Durham, NORTH CAROLINA 27701<br>UNITED STATES<br>angela@affirmed.energy | |
| Allco Renewable Energy Limited | Thomas Melone<br>CEO<br>1740 Broadway<br>FL 15<br>New York, NEW YORK 10019<br>UNITED STATES<br>thomas.melone@gmail.com | |
| Ameren Services Company | Joseph Power<br>Vice President<br>Ameren Services Company<br>1331 Pennsylvania Ave, NW<br>Suite 512N<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>jpower@ameren.com | David B. Hennen, ESQ<br>Managing Associate General Cou<br>Ameren Services Company<br>1901 Chouteau<br>MC 1310<br>St. Louis, MISSOURI 63103<br>dhennen@ameren.com |
| Ameren Services Company | | Denice Simpson<br>Regulatory Affairs<br>Ameren Corporation<br>1331 Pennsylvania Ave, NW<br>Suite 550 South<br>Washington, DISTRICT OF COLUMBIA 20004<br>dsimpson@ameren.com |
| American Council on Renewable Energy | Timothy Olson<br>Policy and Research Manager<br>American Council on Renewable Energy<br>1600 K Street #650<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>olson@acore.org | |
| American Council on Renewable Energy | Todd Foley<br>Senior Vice President<br>American Council on Renewable Energy<br>1600 K St., NW<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>foley@acore.org | |
| American Electric Power Service Corporation | Jessica Cano<br>Senior Counsel<br>AEP Service Corporation<br>1 Riverside Plaza<br>Columbus, OHIO 43215<br>UNITED STATES<br>jacano@aep.com | |

| | | |
|---|---|---|
| American Forest & Paper Association | Robert Weishaar<br>McNees Wallace & Nurick LLC<br>1200 G Street, NW<br>Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>bweishaar@mcneeslaw.com | Susan E Bruce<br>McNees Wallace & Nurick LLC<br>100 Pine St<br>Harrisburg, PENNSYLVANIA 17101<br>sbruce@mcneeslaw.com |
| American Forest & Paper Association | | Kenneth R Stark<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>kstark@mcneeslaw.com |
| American Forest & Paper Association | | Matthew Garber<br>Attorney<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>mgarber@mcneeslaw.com |
| American Municipal Power, Inc. | Lisa McAlister<br>Deputy General Counsel - FERC/<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>UNITED STATES<br>lmcalister@amppartners.org | Kristin V Rothey<br>Asst. Deputy General Counsel<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>krothey@amppartners.org |
| American Municipal Power, Inc. | | Christopher J Norton<br>Director of Market Regulatory<br>American Municipal Power, Inc.<br>1111 Schrock Road<br>Suite 100<br>Columbus, OHIO 43229<br>cnorton@amppartners.org |
| American Municipal Power, Inc. | | Gary James Newell<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street, N.W.<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>gnewell@jsslaw.com |
| AMERICAN PETROLEUM INSTITUTE | Ben Norris<br>Senior Counsel<br>AMERICAN PETROLEUM INSTITUTE<br>1220 L St. NW<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>norrisb@api.org | |
| American Public Power Association | Elise Caplan<br>EMRI Coordinator<br>American Public Power Association<br>1875 Connecticut Avenue, NW<br>Suite 1200<br>Washington, DISTRICT OF COLUMBIA 20009<br>UNITED STATES<br>ecaplan@publicpower.org | |
| American Public Power Association | John McCaffrey<br>Regulatory Counsel<br>American Public Power Association<br>2451 Crystal Drive<br>Suite 1000<br>Arlington, VIRGINIA 22202<br>UNITED STATES<br>jmccaffrey@publicpower.org | |
| American Wind Energy Association | eugene grace<br>Regulatory Attorney<br>1501 M St NW, Ste 1000<br>washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>ggrace@awea.org | |

| | | |
|---|---|---|
| Avangrid Renewables, LLC | Dennis Hough<br>Director - Regulatory Policy<br>Avangrid, Inc.<br>Avangrid<br>607 14th Street NW Suite 540<br>INC000000498534<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>dennis.hough@avangrid.com | Kevin Kilgallen<br>Director, Market Structure & P<br>Avangrid Renewables, LLC<br>411 Oakland Drive<br>Downingtown, PENNSYLVANIA 19335<br>kevin.kilgallen@avangrid.com |
| Avangrid Renewables, LLC | | Christian G Yoder<br>Sr. Counsel, Avangrid Renewab<br>Avangrid Renewables, LLC<br>1125 NW Couch St. Suite 700<br>Portland, OREGON 97209<br>christian.yoder@avangrid.com |
| Bayonne Plant Holding, L.L.C. | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Brandon Shores LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Brunner Island, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Buckeye Power, Inc. | Marvin Griff<br>Partner<br>Thompson Hine LLP<br>1919 M Street, N.W.<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20036-1600<br>UNITED STATES<br>marvin.griff@thompsonhine.com | Kurt Helfrich<br>Buckeye Power, Inc.<br>6677 Busch Boulevard<br>Columbus, OHIO 43229<br>khelfrich@ohioec.org |
| Calpine Corporation | Sarah Novosel<br>Senior VP and Managing Counsel<br>Calpine Corporation<br>805 15th Street, NW<br>Suite 708<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>snovosel@calpine.com | |
| Calpine Corporation | | Joe Kerecman<br>joe.kerecman@calpine.com |
| Calpine Corporation | | David Scarpignato<br>Director Governmental & Regula<br>Calpine Corporation<br>623 Glenbrook Drive<br>Middletown, MARYLAND 21769<br>scarp@calpine.com |
| Camden Plant Holding, L.L.C. | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |

| | | |
|---|---|---|
| Capital Power Corporation | Colleen Smith<br>Capital Power Corporation<br>99 Summer Street<br>Suite 1000<br>Boston, MASSACHUSETTS 02110<br>UNITED STATES<br>csmith@capitalpower.com | |
| CPV Power Holdings, LP | Larry Eisenstat<br>Partner<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave. N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>leisenstat@crowell.com | Patricia M Alexander<br>Advisor<br>Crowell & Moring LLP<br>1001 Pennsylvania Ave. N.W.<br>Washington, DISTRICT OF COLUMBIA 20004<br>palexander@crowell.com |
| CPV Power Holdings, LP | | Jonathan C. Odell, ESQ<br>General Counsel<br>8403 Colesville Road<br>Suite 915<br>Silver Spring, MARYLAND 20910<br>jodell@cpv.com |
| CPV Power Holdings, LP | | thomas rumsey<br>50 Braintree Hill Office Park, Suite 300<br>Braintree, MASSACHUSETTS 02184<br>trumsey@cpv.com |
| CPV Power Holdings, LP | | Nathan B Rushing<br>Director<br>Competitive Power Ventures, Inc.<br>8403 Colesville Road<br>Suite 915<br>Silver Spring, MARYLAND 20910<br>nrushing@cpv.com |
| Deepwater Wind, LLC | Jessica Friedman<br>Van Ness Feldman, LLP<br>1050 Thomas Jefferson St., N.W.<br>Seventh Floor<br>Washington, DISTRICT OF COLUMBIA 20007<br>UNITED STATES<br>jcf@vnf.com | David Schwartz<br>Commercial Director<br>Orsted North America Inc.<br>56 Exchange Ter Ste 300<br>Providence, RHODE ISLAND 02903-1772<br>dschw@orsted.com |
| Delaware Division of the Public Advocate | Regina Iorii<br>Deputy Attorney General<br>Delaware Department of Justice<br>820 N. French Street, 6th Floor<br>Wilmington, DELAWARE 19801<br>UNITED STATES<br>regina.iorii@state.de.us | Andrew C. Slater<br>Delaware Public Advocate<br>29 S. State Street<br>Dover, DELAWARE 19901<br>andrew.slater@delaware.gov |
| Delaware Division of the Public Advocate | | Ruth A. Price<br>Delaware Deputy Public Advocat<br>Delaware Public Advocate<br>820 North French Street, 4th Floor<br>Wiilmington, DELAWARE 19801<br>ruth.price@state.de.us |
| Delaware Division of the Public Advocate | | Andrea Maucher<br>Public Utilities Analyst<br>Delaware Division of the Public Advocate<br>29 South State Street<br>Dover, DELAWARE 19904<br>andrea.maucher@delaware.gov |
| Delaware Public Service Commission | Matthew Hartigan<br>Delaware Public Service Commission<br>861 Silver Lake Blvd.<br>Suite 100<br>Dover, DELAWARE 19904<br>UNITED STATES<br>matthew.hartigan@state.de.us | Joseph DeLosa, III<br>Public Utility Analyst<br>Delaware Public Service Commission<br>861 Silver Lake Blvd.<br>Cannon Bldg. Suite 100<br>Dover, DELAWARE 19904<br>joseph.delosa@state.de.us |
| Direct Energy | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | |

| | | |
|---|---|---|
| Direct Energy Business Marketing, LLC | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | |
| Direct Energy Business Marketing, LLC | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | |
| Direct Energy Business, LLC | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | |
| Direct Energy Marketing Inc. | Marjorie Philips<br>VP, Wholesale Market Policy<br>1700 Broadway, 38th Floor<br>New York, NEW YORK 10019<br>UNITED STATES<br>mphilips@lspower.com | |
| Division of Rate Counsel | Felicia Thomas-Friel<br>Deputy Rate Counsel<br>New Jersey Division of Rate Counsel<br>140 East Front Street<br>4th Floor<br>Trenton, NEW JERSEY 08625<br>UNITED STATES<br>fthomas@rpa.nj.gov | Henry M. Ogden, ESQ<br>Asst. Dep. Rate Counsel<br>New Jersey Department of the Public Advocate<br>PO Box 46005<br>Trenton,NEW JERSEY 07101-8003<br>hogden@rpa.nj.gov |
| Dominion Energy Services, Inc. | Justin Mirabal<br>Associate<br>Reed Smith LLP<br>1301 K St., NW<br>Suite 1100 - East Tower<br>Washington, DISTRICT OF COLUMBIA 20005-3373<br>UNITED STATES<br>jmirabal@reedsmith.com | Wesley Walker<br>Assistant General Counsel<br>Dominion Companies<br>PO Box 25615<br>Richmond,DISTRICT OF COLUMBIA 23260-5615<br>wesley.walker@dominionenergy.com |
| Dominion Energy Services, Inc. | | James G Davis<br>Electric Market Policy Consult<br>Dominion Energy & Dominion Generation<br>701 East Cary Street<br>OJRP 5th Floor<br>Richmond, VIRGINIA 23219<br>james.g.davis@dominionenergy.com |
| Dominion Energy Services, Inc. | | Regina Y. Speed-Bost, ESQ<br>Partner<br>Reed Smith LLP<br>1301 K Street, N.W.<br>Suite 1000<br>Washington, DISTRICT OF COLUMBIA 20005<br>rspeed-bost@reedsmith.com |
| Duke Energy Corporation | Sheri May<br>Associate General Counsel<br>INDIVIDUAL<br>139 East Fourth St.<br>Cincinnati, OHIO 45202<br>UNITED STATES<br>sheri.may@duke-energy.com | |
| Dynegy Marketing and Trade, LLC | Amanda Frazier<br>Vistra Energy Corp.<br>1005 Congress Avenue, Suite 750<br>Austin, TEXAS 78701<br>UNITED STATES<br>Amanda.Frazier@vistraenergy.com | |

| | | |
|---|---|---|
| East Kentucky Power Cooperative, Inc. | Daniel Frank<br>Partner<br>Eversheds Sutherland (US) LLP<br>700 Sixth Street NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20001-3980<br>UNITED STATES<br>DanielFrank@eversheds-sutherland.com | Chuck Dugan<br>Director, Federal and RTO Regu<br>East Kentucky Power Cooperative, Inc.<br>4775 Lexington Road<br>Winchester, KENTUCKY 40391<br>chuck.dugan@ekpc.coop |
| East Kentucky Power Cooperative, Inc. | Allison Speaker<br>Eversheds Sutherland (US) LLP<br>700 6th Street NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>AllisonSpeaker@eversheds-sutherland.com | |
| Eastern Generation, LLC | Liam Baker<br>Vice President Regulatory Affa<br>US Power Generating Co., LLC<br>300 Atlantic Street<br>5th floor<br>Stamford, CONNECTICUT 06901<br>UNITED STATES<br>lbaker@easterngen.com | |
| EDF Renewables, Inc. | Thomas Millar<br>Attorney<br>Willkie Farr & Gallagher<br>1875 K Street, NW<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>tmillar@willkie.com | Joshua Pearson<br>joshua.pearson@edf-re.com |
| Edison Electric Institute | Lopa Parikh<br>Edison Electric Institute<br>701 Pennsylvania Avenue<br>Washington, DISTRICT OF COLUMBIA 20004-2696<br>UNITED STATES<br>lparikh@eei.org | |
| EDP Renewables North America LLC | John Brodbeck<br>Sr. Manager Transmission<br>EDP Renewables North America LLC<br>202 W Park Ave<br>Langhorne, PENNSYLVANIA 19047<br>UNITED STATES<br>john.brodbeck@edpr.com | Leslie Freiman<br>Horizon Wind Energy LLC<br>808 Travis<br>Suite 700<br>Houston, TEXAS 77002<br>leslie.freiman@edpr.com |
| Electric Power Supply Association | Nancy Bagot<br>Vice President<br>Electric Power Supply Association<br>1401 New York Ave. NW<br>11th FLoor<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>NancyB@epsa.org | |
| Elmwood Park Power, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Energy Capital Partners IV, LLC | Andrew Gilbert<br>agilbert@ecpartners.com | Jim Ginnetti<br>jim@jimginnetticonsultingllc.com |
| Enerwise Global Technologies, Inc | Bruce Campbell<br>Director, PJM Affairs<br>CPower, Inc.<br>111 Market Place<br>Suite 201<br>Baltimore, MARYLAND 21202<br>UNITED STATES<br>bruce.campbell@cpowerenergymanagement.com | |

| | | |
|---|---|---|
| ENVIRONMENTAL DEFENSE FUND | Michael Panfil<br>Attorney<br>ENVIRONMENTAL DEFENSE FUND<br>1875 Connecticut Ave NW, Ste 600<br>Washington, DISTRICT OF COLUMBIA 20009<br>UNITED STATES<br>mpanfil@edf.org | |
| Exelon Corporation | Christopher Wilson<br>Director, Federal Regulatory A<br>Exelon Corporation<br>101 Constitution Ave, NW<br>Suite 400E<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>FERCe-filings@exeloncorp.com | Carrie H Allen<br>Assistant General Counsel<br>Exelon Corporation<br>101 Constitution Ave. NW Suite 400 East<br>Washington, DISTRICT OF COLUMBIA 20001<br>carrie.allen@exeloncorp.com |
| Exelon Corporation | | Jason C Barker, ESQ<br>Vice President, Energy Policy<br>Constellation Energy Group Inc.<br>111 Market Place<br>Suite 500<br>Baltimore, MARYLAND 21202<br>jason.barker@constellation.com |
| Exelon Corporation | | Matthew E Price<br>Jenner & Block LLP<br>1099 New York Avenue<br>NW Suite 900<br>Washington, DISTRICT OF COLUMBIA 20001-4412<br>mprice@jenner.com |
| First Energy Service Company | Morgan Parke<br>Attorney<br>FirstEnergy<br>76 South Main Street<br>Akron, OHIO 44308-1890<br>UNITED STATES<br>mparke@firstenergycorp.com | Morgan Parke ESQ<br>Attorney<br>FirstEnergy<br>76 South Main Street<br>Akron, OHIO 44308-1890<br>mparke@firstenergycorp.com |
| First Energy Service Company | | Michelle Henry<br>Manager, FERC and Transmission<br>FirstEnergy Service Company on behalf of its load-serving and transmission-owning affiliates<br>FirstEnergy Service Company<br>76 South Main Street<br>Akron, OHIO 44308-1890<br>mrhenry@firstenergycorp.com |
| First Energy Service Company | | Evan K Dean<br>Attorney<br>FirstEnergy<br>76 S. Main St.<br>Akron, OHIO 44224<br>edean@firstenergycorp.com |
| H.A. Wagner LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Illinois Attorney General's Office | Jacques LeBris Erffmeyer<br>Assistant Attorney General<br>Illinois Attorney General's Office<br>100 W. Randolph St.<br>11th Floor<br>Chicago, ILLINOIS 60601<br>UNITED STATES<br>jerffmeyer@atg.state.il.us | Susan L. Satter<br>Senior Assistant Attorney Gene<br>Illinois Office of Attorney General<br>100 West Randolph Street<br>11th Floor<br>Chicago, ILLINOIS 60601<br>ssatter@atg.state.il.us |
| Illinois Citizens Utility Board | | Kristin Munsch<br>Attorney<br>Citizens Utility Board of Illinois<br>309 W. Washington St. Ste. 800 |

| | | |
|---|---|---|
| | | Chicago, ILLINOIS 60202<br>kmunsch@citizensutilityboard.org |
| Illinois Commerce Commission | Christine Ericson<br>Special Assistant Attorney Gen<br>Illinois Commerce Commission<br>160 N. LaSalle St.<br>Suite C-800<br>Chicago, ILLINOIS 60601<br>UNITED STATES<br>Christine.Ericson@illinois.gov | Randy Rismiller<br>Assistant Director, Policy<br>Illinois Commerce Commission<br>527 East Capitol Avenue<br>Springfield, ILLINOIS 62701<br>Randy.Rismiller@illinois.gov |
| Illinois Commerce Commission | | William VanderLaan<br>bill.vanderlaan@illinois.gov |
| Illinois Municipal Electric Agency | | Troy A Fodor<br>Illinois Municipal Electric Agency<br>3400 Conifer Drive<br>Springfield, ILLINOIS 62711<br>tfodor@imea.org |
| Indiana Office of Utility Consumer Counselor | Arthur Iler<br>Deputy Consumer Counsel - Fede<br>Indiana Office of Utility Consumer Counselor<br>115 W Washington St<br>Ste 1500 South<br>Indianapolis, INDIANA 46204<br>UNITED STATES<br>ailer@oucc.in.gov | |
| Indiana Utility Regulatory Commission | Beth Heline<br>General Counsel<br>Indiana Utility Regulatory Commission<br>Suite 1500 East<br>101 West Washington Street<br>Indianapolis, INDIANA 46204<br>UNITED STATES<br>BHeline@urc.in.gov | Jeremy Comeau<br>Indiana Utility Regulatory Com<br>Indiana Utility Regulatory Commission<br>101 W. Washington St.<br>Suite 1500 E.<br>Indianapolis, INDIANA 46204<br>jcomeau@urc.in.gov |
| Institute for Policy Integrity, New York University School of Law | Avi Zevin<br>Institute for Policy Integrity, New York University School of Law<br>139 MacDougal St.<br>Room 319<br>New York, NEW YORK 10012<br>UNITED STATES<br>avi.zevin@nyu.edu | |
| J-POWER USA Development Co., Ltd. | James O'Brien<br>Partner<br>Baker & McKenzie LLP<br>300 East Randolph Street<br>Suite 5000<br>Chicago, ILLINOIS 60601<br>UNITED STATES<br>James.P.O'Brien@bakermckenzie.com | Stanislav L Sirot<br>Associate<br>Baker & McKenzie LLP<br>300 East Randolph Street<br>Suite 5000<br>Chicago, ILLINOIS 60614<br>Stanislav.Sirot@bakermckenzie.com |
| J-POWER USA Development Co., Ltd. | Matthew Keenan<br>J-POWER USA Development Co. Ltd.<br>1900 East Golf Rd, Ste. 1030<br>Schaumburg, ILLINOIS 60173<br>UNITED STATES<br>mkeenan@jpowerusa.com | |
| J-POWER USA Development Co., Ltd. | Matthew Keenan<br>J-POWER USA Development Co. Ltd.<br>1900 East Golf Rd, Ste. 1030<br>Schaumburg, ILLINOIS 60173<br>UNITED STATES<br>mkeenan@jpowerusa.com | |
| Kentucky Attorney General | | Larry Cook<br>Kentucky Attorney General<br>700 Capitol Ave.<br>Frankfort, KENTUCKY 40601<br>larry.cook@ky.gov |
| Kentucky Attorney General | | Rebecca W Goodman, ESQ<br>Exec. Dir. Rate Intervention,<br>KY Office of Attorney General |

| | | |
|---|---|---|
| | | 1024 Capital Center Drive<br>Frankfort, KENTUCKY 40601<br>Rebecca.Goodman@ky.gov |
| Lower Mount Bethel Energy, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| LS Power Associates, L.P. | Neil Levy<br>500 North Capitol Street, NW<br>Washington, DISTRICT OF COLUMBIA 20001<br>UNITED STATES<br>nlevy@mwe.com | |
| LS Power Associates, L.P. | Tom Hoatson<br>1 Tower Center<br>East Brunswick, NEW JERSEY 08816<br>UNITED STATES<br>thoatson@lspower.com | |
| Martins Creek, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Maryland Office of People's Counsel | William Fields<br>Deputy People's Counsel<br>6 St. Paul St., Ste 2102<br>Baltimore, MARYLAND 21202<br>UNITED STATES<br>william.fields@maryland.gov | |
| Maryland Public Service Commission | Miles Mitchell<br>Deputy General Counsel<br>Maryland Public Service Commission<br>6 St. Paul Street<br>16th Floor, William Donald Schaefer Tower<br>Baltimore, MARYLAND 21202<br>UNITED STATES<br>miles.mitchell@maryland.gov | |
| Michigan Attorney General | Michael Moody<br>Michigan Attorney General<br>Michigan Attorney General<br>525 West Ottawa<br>Lansing, MICHIGAN 48909<br>UNITED STATES<br>moodym2@michigan.gov | |
| Monitoring Analytics, LLC | Jeffrey Mayes<br>General Counsel<br>Monitoring Analytics, LLC<br>2621 Van Buren Avenue, Suite 160<br>Valley Forge Corporate Center<br>Eagleville, PENNSYLVANIA 19403<br>UNITED STATES<br>jeffrey.mayes@monitoringanalytics.com | Joseph Bowring<br>Monitoring Analytics, LLC<br>2621 Van Buren Avenue, Suite 160<br>Norristown, PENNSYLVANIA 19403<br>Joseph.Bowring@monitoringanalytics.com |
| Monitoring Analytics, LLC | | Suzette N Krausen<br>Executive Assistant<br>Monitoring Analytics, LLC<br>2621 Van Buren Ave Ste 160<br>Norristown, PENNSYLVANIA 19403<br>Suzette.Krausen@monitoringanalytics.com |
| Montour, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |

| | | |
|---|---|---|
| National Rural Electric Cooperative Association | Randolph Elliott<br>Partner<br>National Rural Electric Cooperative Association<br>1301 K Street N.W.<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>relliott@mccarter.com | Adrienne E Clair<br>Thompson Coburn LLP<br>Thompson Coburn LLP<br>1909 K Street NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006<br>aclair@thompsoncoburn.com |
| NATURAL GAS SUPPLY ASSOCIATION | Patricia Jagtiani<br>Executive Vice President<br>NATURAL GAS SUPPLY ASSOCIATION<br>1620 I Street NW, Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>pjagtiani@ngsa.org | Casey Gold<br>Regulatory Coordinator<br>NGSA<br>1620 I Street NW<br>Suite 700<br>Washington, DISTRICT OF COLUMBIA 20006<br>casey.gold@ngsa.org |
| NATURAL RESOURCES DEFENSE COUNCIL | | Kim N Smaczniak<br>EARTHJUSTICE<br>1625 Massachusetts Avenue NW<br>Suite 702<br>Washington, DISTRICT OF COLUMBIA 20036<br>ksmaczniak@earthjustice.org |
| NATURAL RESOURCES DEFENSE COUNCIL | Jackson Morris<br>Director, Eastern Energy<br>NATURAL RESOURCES DEFENSE COUNCIL<br>40 West 20th St<br>New York, NEW YORK 10011<br>UNITED STATES<br>jmorris@nrdc.org | |
| New Jersey Board of Public Utilities | Alex Moreau<br>Deputy Attorney General<br>State of New Jersey, Law & Public Safety, Division of Law<br>Law & Public Safety, Division of Law, 124 Halsey Street<br>P.O. Box 45029<br>Newark, NEW JERSEY 07101<br>UNITED STATES<br>Alex.Moreau@law.njoag.gov | |
| New Jersey Board of Public Utilities | | Cynthia Holland<br>New Jersey Board of Public Utilities<br>44 South Clinton Avenue<br>Trenton, NEW JERSEY 08625-0350<br>Cynthia.Holland@bpu.nj.gov |
| New Jersey Board of Public Utilities | Paul Youchak<br>Attorney General of the State of New Jersey<br>25 Market Street<br>Trenton, NEW JERSEY 08611<br>UNITED STATES<br>paul.youchak@law.njoag.gov | Pamela L Owen, ESQ<br>Attorney General of the State of New Jersey<br>pamela.owen@law.njoag.gov |
| New York State Energy Research and Development Authority | Noah Shaw<br>General Counsel<br>New York State Energy Research and Development Authority<br>17 Columbia Circle<br>Albany, NEW YORK 12203<br>UNITED STATES<br>noah.shaw@nyserda.ny.gov | |
| New York State Public Service Commission | Jay Goodman<br>Assistant Counsel<br>New York State Department of Public Service<br>Three Empire State Plaza<br>Albany, NEW YORK 12223-1350<br>UNITED STATES<br>jay.goodman@dps.ny.gov | |
| Newark Bay Cogeneration Partnership, L.P. | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street | |

| | | |
|---|---|---|
| | Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| North Carolina Electric Membership Corporation | Richard Feathers<br>North Carolina Electric Membership Corporation<br>PO Box 27306<br>Select or enter,NORTH CAROLINA 27611-7306<br>UNITED STATES<br>rick.feathers@ncemcs.com | Brenda Lynam<br>Legal<br>North Carolina Electric Membership Corporation<br>PO Box 27306<br>Raleigh,NORTH CAROLINA 27611-7306<br>brenda.lynam@ncemcs.com |
| North Carolina Electric Membership Corporation | Charles Bayless<br>Associate General Counsel<br>North Carolina Electric Membership Corporation<br>3400 Sumner Boulevard<br>Raleigh, NORTH CAROLINA 27616<br>UNITED STATES<br>charlie.bayless@ncemcs.com | |
| North Carolina Electric Membership Corporation | Sean Beeny<br>Attorney<br>INDIVIDUAL<br>1301 K Street N.W.<br>Suite 1000 West<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>sbeeny@mccarter.com | |
| North Carolina Electric Membership Corporation | Denise Goulet<br>Partner<br>McCarter & English, LLP<br>1301 K Street, N.W.<br>Suite 1000 West<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>dgoulet@mccarter.com | |
| NORTHERN VIRGINIA ELECTRIC COOPERATIVE | Alan Robbins<br>Member<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street NW<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>arobbins@jsslaw.com | Patrick Toulme<br>Northern Virginia Electric Cooperative,<br>10323 Lomond Drive<br>Manassas, VIRGINIA 20109<br>ptoulme@novec.com |
| NORTHERN VIRGINIA ELECTRIC COOPERATIVE | Debra Roby<br>Member<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street NW<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>droby@jsslaw.com | Robert Bisson<br>10323 Lomond Drive<br>P.O. Box 2710<br>Manassas, VIRGINIA 20108<br>RBisson@NOVEC.com |
| NORTHERN VIRGINIA ELECTRIC COOPERATIVE | Andrea Sarmentero<br>Jennings, Strouss & Salmon, P.L.C.<br>1350 I Street NW<br>Suite 810<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>asarmentero@jsslaw.com | Michael J. Dailey<br>Northern Virginia Electric Cooperative,<br>10323 Lomond Drive<br>Manassas, VIRGINIA 20109<br>mdailey@novec.com |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Abraham Silverman<br>Assistant General Counsel - Re<br>NRG Energy, Inc.<br>211 Carnegie Center Drive<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>abe.silverman@nrg.com | Neal Fitch<br>Dir. East Regulatory Affairs<br>NRG Energy, Inc.<br>211 Carnegie Center<br>Princeton, NEW JERSEY 08540<br>neal.fitch@nrgenergy.com |
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Cortney Slager<br>Assistant General Counsel - Re<br>NRG Companies<br>804 Carnegie Center<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>cortney.slager@nrg.com | |

| | | |
|---|---|---|
| NRG Power Marketing LLC and GenOn Energy Management, LLC | Jennifer Hsia<br>NRG Energy<br>211 Carnegie Center<br>Princeton, NEW JERSEY 08540<br>UNITED STATES<br>jennifer.hsia@nrg.com | |
| NUCLEAR ENERGY INSTITUTE | Jonathan Rund<br>Associate General Counsel<br>NUCLEAR ENERGY INSTITUTE<br>Nuclear Energy Institute<br>1201 F Street, NW, Suite 1100<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>jmr@nei.org | |
| NUCLEAR ENERGY INSTITUTE | Jonathan Rund<br>Associate General Counsel<br>NUCLEAR ENERGY INSTITUTE<br>Nuclear Energy Institute<br>1201 F Street, NW, Suite 1100<br>Washington, DISTRICT OF COLUMBIA 20004<br>UNITED STATES<br>jmr@nei.org | |
| NUCLEAR ENERGY INSTITUTE | Ellen Ginsberg<br>Vice Presidet, Secretary, and<br>NUCLEAR ENERGY INSTITUTE<br>1776 I Street, NW<br>Suite 400<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>ecg@nei.org | |
| Office of the People's Counsel for the District of Columbia | Sandra Mattavous-Frye<br>Deputy People's Counsel<br>smfrye@opc-dc.gov | Dwayne C Houston<br>Litigation Assistant<br>Office of the People's Counsel for the District of Columbia<br>1133 15th Street, NW<br>Suite 500<br>Washington, DISTRICT OF COLUMBIA 20005<br>dhouston@opc-dc.gov |
| Ohio Consumers' Counsel | Kevin Moore<br>Assistant Consumers' Counsel<br>Office of the Ohio Consumers' Counsel<br>10 West Broad Street<br>Suite 1800<br>Columbus, OHIO 43215<br>UNITED STATES<br>kevin.moore@occ.ohio.gov | |
| Old Dominion Electric Cooperative | Adrienne Clair<br>Thompson Coburn LLP<br>Thompson Coburn LLP<br>1909 K Street NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>aclair@thompsoncoburn.com | Kayla Grant<br>Thompson Coburn LLP<br>1909 K Street NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20006<br>kgrant@thompsoncoburn.com |
| Organization of PJM States, Inc. | Gregory Carmean<br>Executive Director<br>Organization of PJM States, Inc.<br>249 East Main Street<br>Newark, DELAWARE 19711<br>UNITED STATES<br>greg@opsi.us | |
| Panda Power Generation Infrastructure Fund, LLC | Robert O'Connell<br>Director, Regulatory Affairs<br>Panda Power Funds<br>1033 Squires Drive<br>West Chester, PENNSYLVANIA 19382<br>UNITED STATES<br>boconnell@pandafunds.com | |

| | | |
|---|---|---|
| Pedricktown Cogeneration Company LP | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Pennsylvania Public Utility Commission | Aspassia Staevska<br>Assistant Counsel<br>Pennsylvania Public Utility Commission<br>400 North Street<br>Harrisburg, PENNSYLVANIA 17120<br>UNITED STATES<br>astaevska@pa.gov | |
| PJM Industrial Customer Coalition | Susan Bruce<br>McNees Wallace & Nurick LLC<br>100 Pine St<br>Harrisburg, PENNSYLVANIA 17101<br>UNITED STATES<br>sbruce@mcneeslaw.com | Robert A Weishaar, JR<br>McNees Wallace & Nurick LLC<br>1200 G Street, NW<br>Suite 800<br>Washington, DISTRICT OF COLUMBIA 20005<br>bweishaar@mcneeslaw.com |
| PJM Industrial Customer Coalition | | Vasiliki Karandrikas<br>PO Box 1166<br>Harrisburg, 17108-1166<br>vkarandrikas@mcneeslaw.com |
| PJM Industrial Customer Coalition | | David S. Mabry<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>Harrisburg, PENNSYLVANIA 17101<br>dmabry@mwn.com |
| PJM Industrial Customer Coalition | | Lauren Huff<br>Paralegal<br>McNees Wallace & Nurick LLC<br>100 Pine Street<br>P.O. Box 1166<br>Harrisburg, PENNSYLVANIA 17108<br>lhuff@mwn.com |
| PJM Interconnection, L.L.C. | Paul Flynn<br>Wright & Talisman, PC<br>1200 G St. NW<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>UNITED STATES<br>flynn@wrightlaw.com | Ryan Collins<br>Attorney<br>Wright & Talisman, PC<br>1200 G Street, N.W., Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>collins@wrightlaw.com |
| PJM Interconnection, L.L.C. | | CRAIG GLAZER<br>V.P., Federal Gov't Policy<br>PJM Interconnection, L.L.C.<br>1200 G Street, N.W.<br>Suite 600<br>Washington, DISTRICT OF COLUMBIA 20005<br>CRAIG.GLAZER@PJM.COM |
| PJM Interconnection, L.L.C. | | Jennifer H Tribulski, ESQ<br>Senior Counsel<br>PJM Interconnection, L.L.C.<br>2750 Monroe Boulevard<br>Audubon, PENNSYLVANIA 19403<br>jennifer.tribulski@pjm.com |
| PJM Interconnection, L.L.C. | | Chenchao Lu<br>Counsel<br>PJM Interconnection, L.L.C.<br>2750 Monroe Blvd.<br>Audubon, PENNSYLVANIA 19403<br>chenchao.lu@pjm.com |
| PJM Power Providers Group | Glen Thomas<br>1060 First Avenue<br>Suite 400<br>King of Prussia, PENNSYLVANIA 19406<br>UNITED STATES<br>gthomas@gtpowergroup.com | Diane L Slifer<br>1060 First Avenue<br>Suite 400<br>King of Prussia, PENNSYLVANIA 19406<br>dslifer@gtpowergroup.com |

| | | |
|---|---|---|
| PJM Power Providers Group | | Laura Chappelle<br>4218 Jacob Meadows<br>Okemos, MICHIGAN 48864<br>laurac@chappelleconsulting.net |
| PPL Electric Utilities Corporation | Steven Nadel<br>PPL Services Corporation<br>2 North 9th St<br>Allentown, PENNSYLVANIA 18101<br>UNITED STATES<br>SMNadel@pplweb.com | |
| PSEG Companies | Cara Lewis<br>Assistant Regulatory Counsel<br>80 Park Plaza, T5<br>Newark, NEW JERSEY 07102<br>UNITED STATES<br>cara.lewis@pseg.com | Cara Lewis<br>Assistant Regulatory Counsel<br>80 Park Plaza, T5<br>Newark, NEW JERSEY 07102<br>cara.lewis@pseg.com |
| PSEG Companies | | Sheree L. Kelly, ESQ<br>Assistant General Regulatory C<br>PSEG Services Corporation<br>80 Park Plaza, T5G<br>Newark, NEW JERSEY 07102<br>Sheree.Kelly@PSEG.com |
| PUBLIC CITIZEN, INC | Tyson Slocum<br>Director<br>Public Citizen's Energy Program<br>215 Pennsylvania Ave SE<br>Washington, DISTRICT OF COLUMBIA 20003<br>UNITED STATES<br>tslocum@citizen.org | |
| Public Service Commission of West Virginia | Robert Adkins<br>Law Clerk<br>Public Service Commission of West Virginia<br>201 Brooks Street<br>Charleston, WEST VIRGINIA 25526<br>UNITED STATES<br>radkins@psc.state.wv.us | |
| Public Utilities Commission of Ohio | Thomas McNamee<br>Assistant Attorney General<br>Ohio Public Utilities Commission<br>30 East Broad Street<br>16th fl<br>Columbus, OHIO 43215<br>UNITED STATES<br>thomas.mcnamee@ohioattorneygeneral.gov | Lori Sternisha<br>Public Utilities Commission of Ohio<br>180 East Broad Street<br>3rd Floor<br>Columbus, OHIO 43215<br>lori.sternisha@puco.ohio.gov |
| Rockland Capital | Travis Stewart<br>Associate<br>GABEL ASSOCIATES<br>417 Denison Street<br>Highland Park, NEW JERSEY 08904<br>UNITED STATES<br>travis.stewart@gabelassociates.com | Jonathan Beach<br>24 Waterway Avenue<br>Suite 800<br>The Woodlands, TEXAS 77380<br>jonathan.beach@rocklandcapital.com |
| Rockland Electric Company | Margaret Comes<br>Senior Attorney<br>Consolidated Edison Company of New York, Inc.<br>4 Irving Place - Room 1815-S<br>New York, NEW YORK 10003<br>UNITED STATES<br>comesm@coned.com | Brian L Wilkie<br>Project Specialist<br>Consolidated Edison Company of New York, Inc.<br>Consolidated Edison Company of New York, Inc.<br>4 Irving Place, NEW YORK 10003<br>wilkieb@coned.com |
| Shell Energy North America (U.S.), L.P. | David Perlman<br>Bracewell LLP<br>2000 K Street, NW Suite 500<br>Washington, DISTRICT OF COLUMBIA 20006<br>UNITED STATES<br>david.perlman@bracewelllaw.com | Matthew J. Picardi, ESQ<br>Vice President<br>Shell Energy North America (US), L.P.<br>36 Pinewood Ave.<br>Saratoga Springs, NEW YORK 12866<br>Matthew.Picardi@shell.com |
| Sierra Club | Casey Roberts<br>Senior Attorney<br>Sierra Club<br>1536 Wynkoop St, Suite 200<br>Denver, COLORADO 80202 | |

| | | |
|---|---|---|
| | UNITED STATES<br>casey.roberts@sierraclub.org | |
| Solar RTO Coalition | Steven Shparber<br>Nelson Mullins Riley & Scarborough, LLP<br>101 Constitution Ave, NW<br>Suite 900<br>Washington, DISTRICT OF COLUMBIA 200009<br>UNITED STATES<br>steven.shparber@nelsonmullins.com | Weston Adams<br>Partner<br>Nelson Mullins Riley & Scarborough, LLP<br>Nelson Mullins Riley & Scarborough<br>1320 Main St. 17th Fl.<br>Columbia, SOUTH CAROLINA 29201<br>weston.adams@nelsonmullins.com |
| Solar RTO Coalition | | Larry Ostema, ESQ<br>Nelson Mullins Riley & Scarborough, LLP<br>100 North Tryon Street<br>Charlotte, NORTH CAROLINA 28202<br>larry.ostema@nelsonmullins.com |
| Southern Maryland Electric Cooperative, Inc. | John Rohrbach<br>ACES POWER MARKETING<br>4140 West 99th Street<br>Carmel, INDIANA 46032<br>UNITED STATES<br>JRohrbach@acespower.com | Eugene Bradford<br>Vice President, Rates and Ener<br>SOUTHERN MARYLAND ELECTRIC COOP INC<br>15035 Burnt Store Rd.<br>Hughesville, MARYLAND 20637<br>Eugene.Bradford@smeco.coop |
| Southern Maryland Electric Cooperative, Inc. | | Mark MacDougall<br>Senior Vice President and Gene<br>Southern Maryland Electric Cooperative, Inc.<br>PO Box 1937<br>Hughesville, 20637-1937<br>mark.macdougall@smeco.coop |
| Southern Maryland Electric Cooperative, Inc. | | John Rohrbach<br>ACES POWER MARKETING<br>4140 West 99th Street<br>Carmel, INDIANA 46032<br>JRohrbach@acespower.com |
| Starwood Energy Group Global, L.L.C. | Jonathan Gottlieb<br>Partner<br>Eversheds Sutherland (US) LLP<br>700 Sixth Street, NW, Suite 700<br>Washington, DISTRICT OF COLUMBIA 20001-3980<br>UNITED STATES<br>JonathanGottlieb@eversheds-sutherland.com | Jeffrey Delgado<br>Senior Vice President<br>Starwood Energy Group Global, LLC<br>5 Greenwich Office Park<br>Greenwich, CONNECTICUT 06831<br>jdelgado@starwood.com |
| Susquehanna Nuclear, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| Sustainable FERC Project | Miles Farmer<br>Staff Attorney<br>Sustainable FERC Project<br>40 W. 20th St.<br>New York, NEW YORK 10011<br>UNITED STATES<br>milesfarmer.fercproject@gmail.com | |
| Talen Energy Marketing, LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |
| The Dayton Power and Light Company | Randall Griffin<br>Chief Regulatory Counsel<br>Dayton Power and Light Company, The<br>1065 Woodman Drive<br>Dayton, OHIO 45432<br>UNITED STATES<br>randall.griffin@aes.com | John W Horstmann<br>Dayton Power and Light Company, The<br>315 Buckwalter Rd<br>Phoenixville, PENNSYLVANIA 19460<br>john.horstmann@aes.com |

| | | |
|---|---|---|
| UNION OF CONCERNED SCIENTISTS | Michael Jacobs<br>Sr. Energy Analyst<br>UNION OF CONCERNED SCIENTISTS<br>2 Brattle Square<br>Cambridge, MASSACHUSETTS 02138<br>UNITED STATES<br>mjacobs@ucsusa.org | |
| UNION OF CONCERNED SCIENTISTS | Michael Jacobs<br>Sr. Energy Analyst<br>UNION OF CONCERNED SCIENTISTS<br>2 Brattle Square<br>Cambridge, MASSACHUSETTS 02138<br>UNITED STATES<br>mjacobs@ucsusa.org | |
| Vistra Energy Corp. | Amanda Frazier<br>Vistra Energy Corp.<br>1005 Congress Avenue, Suite 750<br>Austin, TEXAS 78701<br>UNITED STATES<br>Amanda.Frazier@vistraenergy.com | |
| Wabash Valley Power Association, Inc. | Liane Steffes<br>Attorney<br>Parr Richey Obremskey Frandsen & Patterson LLP<br>201 N. Illinois Street, Suite 300<br>Indianapolis, INDIANA 46204<br>UNITED STATES<br>lsteffes@parrlaw.com | Jeremy Lee Fetty<br>Attorney<br>Parr Richey Obremskey & Morton<br>PO Box 668<br>Lebanon,INDIANA 46052-0668<br>jfetty@parrlaw.com |
| Wabash Valley Power Association, Inc. | | Randolph G Holt<br>General Counsel<br>Parr Richey Obremskey Frandsen & Patterson LLP<br>6702 Intech Boulevard<br>Indianapolis, INDIANA 46278<br>r_holt@wvpa.com |
| Wabash Valley Power Association, Inc. | | Sondra L Craig<br>Legal Assistant<br>Parr Richey Obremskey Frandsen & Patterson LLP<br>251 North Illinois Street<br>Suite 1800<br>Indianapolis, INDIANA 46204<br>scraig@parrlaw.com |
| WEST VIRGINIA CONSUMER ADVOCATE | Jacqueline Lake Roberts<br>Deputy Consumer Advocate<br>Consumer Advocate Div / WV Public Serv. Comm.<br>723 Kanawha Blvd Suite 700<br>Charleston, WEST VIRGINIA 25312<br>UNITED STATES<br>jroberts@cad.state.wv.us | |
| York Generation Company LLC | Debra Raggio<br>Senior Vice President, Regulat<br>Talen Energy Corporation<br>117 Oronoco Street<br>Alexandria, VIRGINIA 22314<br>UNITED STATES<br>debra.raggio@talenenergy.com | |

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