UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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Compensation for Reactive Power Within the Standard Power Factor Range

Docket No. RM22-2-000

REPLY COMMENTS OF THE INDICATED TRADE ASSOCIATIONS

The Electric Power Supply Association ("EPSA"),¹ The PJM Power Providers Group ("P3"),² the New England Power Generators Association, Inc. ("NEPGA"),³ Independent Power Producers of New York, Inc. ("IPPNY"),⁴ and the Coalition of Midwest

¹ EPSA is the national trade association representing competitive power suppliers in the U.S. EPSA members provide reliable and competitively priced electricity from environmentally responsible facilities using a diverse mix of fuels and technologies. EPSA seeks to bring the benefits of competition to all power customers. This filing represents the position of EPSA as an organization, but not necessarily the views of any particular member with respect to any issue.

² P3 is a non-profit organization dedicated to advancing federal, state and regional policies that promote properly designed and well-functioning electricity markets in the PJM Interconnection, L.L.C. ("PJM") region. Combined, P3 members own over 83,000 MW of generation assets and produce enough power to supply over 63 million homes in the PJM region covering 13 states and the District of Columbia. For more information on P3, visit www.p3powergroup.com. This filing represents the position of P3 as an organization, but not necessarily the views of any particular member with respect to any issue.

³ NEPGA is the trade association representing competitive power generators in New England. NEPGA's member companies represent over 90 percent of the installed capacity in New England. NEPGA's mission is to support competitive wholesale electricity markets in New England. NEPGA believes that open markets guided by stable public policies are the best means to provide reliable and competitively priced electricity for consumers. A sensible, market-based approach furthers economic development, jobs and balanced environmental policy for the region. NEPGA's member companies are responsible for generating and supplying electric power for sale within the New England bulk power system. This filing represents the position of NEPGA as an organization, but not necessarily that of any particular member. NEPGA is also filing separate reply comments in this proceeding.

⁴ IPPNY is a not-for-profit trade association representing companies involved in the development of electric generating facilities, the generation, sale, and marketing of electric power, and the development of natural gas facilities in the State of New York. IPPNY member companies produce a majority of New York's electricity, utilizing almost every generation technology available today, such as wind, solar, natural gas, oil, hydro, biomass, energy storage, waste-to-energy, and

Power Producers ("COMPP")⁵ (collectively, the "Indicated Trade Associations") hereby submit these reply comments regarding the notice of proposed rulemaking issued by the Federal Energy Regulatory Commission ("FERC" or the "Commission") in the above-captioned proceeding.⁶

The initial comments filed in this proceeding demonstrate strong opposition to the Commission's extreme proposal to eliminate compensation to generators for providing reactive service within the standard power factor range of 0.95 leading to 0.95 lagging (also referred to herein as the "deadband").⁷ The Indicated Trade Associations and numerous others explained and provided testimony demonstrating that the provision of reactive power imposes significant costs on generators, and that wholesale elimination of

nuclear. This filing represents the position of IPPNY as an organization, but not necessarily the views of any particular member with respect to any issue. IPPNY is also filing separate reply comments in this proceeding.

⁵ COMPP is a non-profit trade association where member companies work together on a cooperative basis to maintain and develop independent, transparent, non-discriminatory, robust, and fully competitive wholesale energy, capacity and ancillary service markets within the Midcontinent Independent System Operator, Inc. ("MISO") region. COMPP members strive to create a "level playing field" in the further development and evolution of MISO's market design working within the open stakeholder process where MISO operates as the nation's first FERC approved Regional Transmission Organization managing the reliable supply and transmission of power within a 15-state region ranging from the Gulf of Mexico to the Canadian province of Manitoba. This filing represents the position of COMPP as an organization, but not necessarily the views of any particular member with respect to any issue.

⁶ Compensation for Reactive Power Within the Standard Power Factor Range, 186 FERC ¶ 61,203 (2024) (the "NOPR"). The Indicated Trade Associations submitted initial comments on the NOPR. See Comments of the Indicated Trade Associations, Docket No. RM22-2-000 (filed May 28, 2024) (the "Indicated Trade Associations Comments").

⁷ "Reactive power" or "reactive service" provided by generators is also referred to as "Reactive Supply and Voltage Control from Generation Sources Service." *See 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, 61 FR 21,540, 21,581 (1996) (cross-referenced at 75 FERC ¶ 61,080) ("Order No. 888"), *on reh'g*, Order No. 888-A, 62 FR 12,274 (1997) (cross-referenced at 78 FERC ¶ 61,220), *on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd sub nom. Transmission Access Policy Study Grp. v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002).

separate compensation for such costs would upset the expectations of investors and jeopardize reliability by eliminating a stable revenue stream that was relied on to make projects financeable and by eliminating incentives for generators to do anything beyond the bare minimum requirements imposed under their interconnection agreements. Two regional transmission organizations ("RTOs")/independent system operators ("ISOs") also explained that they have implemented compensation mechanisms that address the concerns raised in the NOPR and that such compensation is necessary for reliability. By contrast, the comparatively few commenters supporting the NOPR simply repeated unsupported assertions and arguments made in the NOPR itself, without providing additional evidence that would bolster those positions. None of those supporters put forward a valid rationale for denying generators compensation for a service that is necessary for reliability, especially when transmission owners will continue to receive compensation for providing the very same service, likely at higher costs to consumers. As a result, the Commission should withdraw its NOPR proposal and instead focus its efforts on improving and streamlining the methodologies used to determine reactive service compensation for generators, consistent with the earlier notice of inquiry in this proceeding.⁸

I. INITIAL COMMENTS IN THIS PROCEEDING DO NOT JUSTIFY IMPLEMENTING THE NOPR PROPOSAL

As a proponent of changes to existing rules relating to reactive power compensation, the Commission bears the burden under Section 206 of the Federal Power

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See Reactive Power Capability Compensation, 177 FERC ¶ 61,118 (2021) (the "NOI").

Act (the "FPA")⁹ to demonstrate that those existing rules are unjust and unreasonable,¹⁰ and that its proposed replacement rate is just and reasonable and not unduly preferential or discriminatory.¹¹ As explained in the Indicated Trade Associations Comments, the Commission failed to satisfy either of those burdens and based the NOPR on a number of unsupported and flawed assertions.¹² Those shortcomings are not remedied by any of the supporting comments.

A. The Record Fails to Satisfy the Commission's First Burden under FPA Section 206 to Demonstrate Separate Reactive Service Compensation is Unjust or Unreasonable

Rather than providing evidence demonstrating the existing reactive service compensation rules are unjust or unreasonable, the comments supporting the NOPR simply repeat the Commission's assertions in the NOPR. For example, the NOPR claimed, without support, that "providing compensation for the provision of reactive power within the standard power factor range is unjust and unreasonable because the generating facility already provides reactive power within the standard power factor range at no cost or *de minimis* cost^{*13} None of the NOPR supporters provides evidentiary support that would back up those assertions. Instead, one supporter simply states that

⁹ 16 U.S.C. § 824e(a) (2018).

¹⁰ See, e.g., International Transmission Co. v. FERC, 988 F.3d 471, 483 (D.C. Cir. 2021) (stating that Section 206's "procedures 'are 'entirely different' and 'stricter' than those of section 205," because "the proponent of a rate change under Section 206 'bears 'the burden of proving that the existing rate is unlawful" (citations omitted)).

¹¹ See, e.g., Tennessee Gas Pipeline Co. v. FERC, 860 F.2d 446, 454 (D.C. Cir. 1998) (discussing parallel provisions of the Natural Gas Act and explaining that once the Commission has found an existing rate to be unjust and unreasonable, "*the Commission* is required to reach a further determination: the just and reasonable rate to be fixed in place of either an unlawful proposed or existing rate" (emphasis in original)).

¹² See Indicated Trade Associations Comments at 7-15.

¹³ NOPR, 186 FERC ¶ 61,203 at P 28.

"the Commission explains that generating facilities provide reactive power within the standard power factor range 'at no cost or de minimis cost,"¹⁴ while another similarly claims that "[t]he Commission found that providing this required service (reactive power) is either 'no cost' or 'de minimis cost'¹⁵ In fact, the only testimony filed in support of the NOPR concedes that "[t]he interconnection responsibilities will result in costs for a generating facility,"¹⁶ but then goes on to summarily assert that "[m]eeting the responsibility to have the reactive power capability to operate the generation facility within the standard power factor range will result in a cost that should be the responsibility of the generating facility, not transmission customers."¹⁷

By contrast, the Indicated Trade Associations and others demonstrated the Commission's assumptions regarding the costs of reactive power to be erroneous. Among other things, the Indicated Trade Associations Comments included an affidavit by Sherman Knight, the President and Chief Commercial Officer of Competitive Power Ventures ("CPV"), explaining that providing reactive power requires the installation of additional equipment, where "[f]or a 1,000 MW thermal power plant, the cost difference of the larger equipment would easily be in the millions of dollars," and that, for solar-powered plants, "depending upon the VAR capability required, larger or additional inverters could add hundreds of thousands of dollars of incremental costs to be able to

¹⁴ Comments of American Electric Power Service Corporation at 5, Docket No. RM22-2-000 (filed May 28, 2024).

¹⁵ Comments of Portland General Electric Company at 3, Docket No. RM22-2-000 (filed May 28, 2024).

¹⁶ Comments of Old Dominion Electric Cooperative, Northern Virginia Electric Cooperative, Inc., and Dominion Energy Services, Inc. (the "Joint Customers Comments"), Attachment A, Affidavit of Dr. Albert W. Bremser at P 14, Docket No. RM22-2-000 (filed May 28, 2024).

¹⁷ *Id.* at P 15 (footnote omitted).

operate beyond a power factor of 1.0.^{"18} A group of suppliers also submitted testimony by Dennis W. Bethel, P.E. on the additional cost required to provide reactive power,¹⁹ while the PSEG Companies submitted testimony pointing to a 2014 report by Commission Staff, which found that "the cost of reactive power equipment is approximately 4% of the total capital costs of a wind generating facility and 2% of the total capital costs of a solar generating facility."²⁰ Given that the capital cost of a wind-powered facility is currently estimated to range between \$1,489/kW to \$3,689/kW,²¹ while the capital cost of a solar facility ranges from \$1,502/kW to \$2,561/kW,²² the cost of providing reactive power can be expected to cost millions of dollars for a 100 MW facility, hardly "de minimis" as the NOPR claims.

The NOPR also expressed concern that, under the Commission's existing approach, "generating facilities are eligible to receive cost-based reactive power payments that do not reflect the reliability benefits of the reactive power at each facility's

¹⁸ Indicated Trade Associations Comments, Attachment A, Affidavit of Sherman Knight at P 11 (the "Knight Affidavit").

¹⁹ See Initial Comments Opposing Proposed Rule of Reactive Service Providers at 37-40, Docket No. RM22-2-000 (filed May 28, 2024) (the "Reactive Service Providers Comments"); *id.*, Attachment A, Affidavit of Dennis W. Bethel, P.E. at PP 94-106.

²⁰ Comments of the PSEG Companies (the "PSEG Companies Comments"), Exhibit No. PSEG-1, Prepared Direct Testimony and Exhibits of Dr. Paul A. Dumais at 20 (the "Dumais Testimony"), Docket No. RM22-2-000 (filed May 28, 2024) (footnote omitted). *See also id.*, Exhibit No. PSEG-5, FERC Staff Report, *Payment for Reactive Power*, Appendix 2 at 3, Docket No. AD14-7-000 (Apr. 22, 2014).

²¹ See U.S. Energy Information Administration, *Capital Cost and Performance Characteristics for Utility-Scale Electric Power Generating Technologies*, at III-IV, Table 1-2 (Jan. 2024) (costs of Onshore Wind – Large Plant Footprint: Great Plains Region and Fixed-bottom Offshore Wind: Monopile Foundations), https://www.eia.gov/analysis/studies/powerplants/ capitalcost/pdf/capital_cost_AEO2025.pdf.

²² See id. at IV, Table 1-2 (cost of Solar PV with Single-Axis Tracking and Solar PV with Single-Axis Tracking and DC-Coupled Battery Storage). See also Knight Affidavit at P 11 (discussing cost of inverters for solar facilities).

location²³ and that reactive power payments have increased but "transmission customers may not be receiving a roughly commensurate increase in reliability benefit.²⁴ Again, however, the NOPR did not cite supporting evidence for these claims, nor have supporting commenters provided any evidence to buttress the NOPR's assertions. The mere fact that reactive power payments may have increased does not establish that such payments are unjust or unreasonable so as to satisfy the Commission's burden under Section 206 of the FPA; in fact, the Reactive Service Providers Comments explain that such increase could instead be attributable to other factors,²⁵ such as an increase in the number of generators in certain regions, or the fact that the Commission now requires all generators, including renewable resources,²⁶ to provide reactive power.

Critically, even if supporters of the NOPR proposal could show that generators are being compensated for reactive power that is not needed to maintain reliability (which they have not done), the fact remains that Commission policy currently requires all generators to incur the costs of providing reactive power, and generators are thus entitled to recover such costs under the FPA and the U.S. Constitution.²⁷ Neither the Commission nor any commenter has explained why it is lawful or logical to require generators to incur the expense of installing reactive power capability because it is supposedly needed for reliability, but then turn around and claim that generators do not deserve compensation based on the rationale that such capability is not needed.

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²³ NOPR, 186 FERC ¶ 61,203 at P 35.

²⁴ *Id.* at P 40 (footnote omitted).

²⁵ See Reactive Service Providers Comments at 29-34.

²⁶ See NOPR, 186 FERC ¶ 61,203 at P 14 (explaining that the Commission eliminated prior exemptions from the reactive power requirements for wind generating facilities).

²⁷ See Indicated Trade Associations Comments at 22-24; *id.* at 28.

A number of NOPR supporters also echo the Commission's concerns that "implementing the Commission-approved AEP Methodology has become increasingly administratively burdensome....²⁸ For example, PJM submitted comments that focused almost exclusively on "[t]he significant investment of time and resources" required for reactive power rate cases,²⁹ while the Joint Customers Comments also complain that "the case-by-case approach to reactive capability rates based on the AEP methodology makes it very difficult for proceedings to be resolved in an efficient manner."³⁰ But it is a given that "ratemaking is a complex and difficult task,"³¹ and the FPA does not relieve the Commission of its obligation to ensure that all rates are just and reasonable because that task may be onerous. That is particularly true here where, in response to the NOI, the Indicated Trade Associations and others suggested approaches that the Commission could use to simplify the job, but the Commission has instead decided to throw out the baby with the bathwater. Similarly, while the Joint Customers Comments raise concerns that "[t]he complexity of the current structure also creates significant issues with refund protections for customers,"³² the fact that the refund period is limited by statute or that the

²⁸ NOPR, 186 FERC ¶ 61,203 at P 27. The AEP Methodology takes its name from *American Electric Power Serv. Corp.*, Opinion No. 440, 88 FERC ¶ 61,141 (1999).

²⁹ Comments of PJM Interconnection, L.L.C. at 2, Docket No. RM22-2-000 (filed May 28, 2024) (the "PJM Comments").

³⁰ Joint Customers Comments at 7.

³¹*Nader v. FCC*, 520 F.2d 182, 204 (D.C. Cir. 1975). See also, e.g., Duquesne Light Co. v. Barasch, 488 U.S. 299, 307-308 (1989) ("The guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so 'unjust' as to be confiscatory. . . . As has been observed, however, '[h]ow such compensation may be ascertained, and what are the necessary elements in such an inquiry, will always be an embarrassing question.'" (citations omitted)); *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1518 (D.C. Cir. 1984) (noting that "the formulation of a method for calculating transitional rate bases involves questions no more complex than those confronting FERC regularly").

³² Joint Customers Comments at 9. See also id. at 9-11.

Commission has not acted within that period does not justify eliminating reactive power compensation within the deadband altogether.

Similarly unavailing is the NOPR's contention that the AEP Methodology has resulted in a "wide range of actual compensation, which is both above and below the amount of assumed reactive power compensation in the [PJM] capacity market rules, [that] can lead to market distortions."³³ Any rates for reactive power are approved by the Commission and, consistent with Order No. 888, are based on the individualized costs of specific generators.³⁴ By contrast, the assumed reactive power revenues used in PJM's capacity market rules are a proxy and are no different than a variety of other proxies used by PJM, including estimates of the cost of new entry, which may not exactly track the circumstances of any particular supplier.³⁵ Moreover, any purported distortions do not necessarily result from separate compensation for reactive service but may instead result from the structure of PJM's capacity market rules. In fact, while the NOPR repeats arguments by the Independent Market Monitor for PJM (the "PJM IMM") that the AEP Methodology can distort "the utility's total recovery when cost-based reactive power payments are added to any market recoveries,"³⁶ the Commission previously recognized that such concerns result from the "methodology for determining the [Energy and Ancillary

³³ NOPR, 186 FERC ¶ 61,203 at P 39 (footnote omitted). *See also* Comments of the Independent Market Monitor for PJM at 5-6, Docket No. RM22-2-000 (filed May 28, 2024) (the "PJM IMM Comments").

³⁴ See Order No. 888, 61 FR at 21,590.

³⁵ See PJM IMM Comments at 6 (explaining that the PJM capacity market uses "the costs of new entry of a *reference* generating unit" (emphasis added)).

³⁶ NOPR, 186 FERC ¶ 61,203 at P 39 (citing Comments of the Independent Market Monitor for PJM at 2, Docket No. RM22-2-000 (filed Feb. 25, 2022)).

Services] Offset in PJM's capacity market."³⁷ More importantly, the Commission has a responsibility to ensure *all* rates are just and reasonable; it cannot justify eliminating compensation for reactive service simply due to the interaction with the market rules for a different product.

B. The Record Fails to Satisfy the Commission's Second Burden under FPA Section 206 to Support Wholesale Elimination of Reactive Service Compensation

Not only has the Commission failed to satisfy its burden under Section 206 of the FPA to show that its existing reactive power compensation policy rate is unjust and unreasonable, but it has also failed to demonstrate that its proposed replacement rate is just and reasonable and not unduly preferential or discriminatory.³⁸

1. The NOPR Proposal Will Adversely Affect Reliability

In response to the NOPR, the Indicated Trade Associations submitted testimony by Mr. Knight of CPV and Michael Borgatti, Senior Vice President of RTO Services and Regulatory Affairs at Gabel Associates, explaining that investors have made decisions to invest and continue to operate generation resources, and have also entered into financing and other arrangements, based on their expectations regarding reactive power revenues. The Indicated Trade Associations thus warned that eliminating reactive power compensation within the deadband would upset those expectations because the lost

³⁷ Panda Stonewall LLC, Opinion No. 574, 174 FERC ¶ 61,266 at P 218 (2021) (footnote omitted). See also id. at P 215 (explaining that the PJM IMM had argued that, "when the actual level of reactive power revenue exceeds the \$2,199/MW-year level, the actual reactive power revenues are not reflected in the offset in the Net CONE calculation or the offset in capacity market offers, and such offers are too high by that difference" (footnote omitted)).

³⁸ See 16 U.S.C. § 824e(a) (2018). See also Emera Me. v. FERC, 854 F.3d 9, 25 (D.C. Cir. 2017) (discussing the Commission's "dual burden" under FPA Section 206); *FirstEnergy Servs. Co. v. FERC*, 758 F.3d 346, 353 (D.C. Cir. 2014) (same).

revenues would not necessarily be recoverable in other ways, and that the NOPR proposal would also eliminate incentives to continue to invest in reactive power capability beyond the minimum requirements required under interconnection agreements. Other parties raised similar concerns. For example, Dr. Dumais, testifying for the PSEG Companies, explained:

[T]he NOPR would increase the risk of revenue certainty to generators at a time when PJM is already facing a wave of retirements of baseload, thermal generation, which has caused PJM to raise concerns of resource adequacy. Moreover, under the NOPR, for most resources, there will simply be no financial incentive to make the necessary capital investments to provide additional reactive power capability in the future. This is because the capacity offer price of any individual resource is unlikely to influence the outcome of the capacity auction, and [a] generation resource will get the same capacity payment whether or not it provides reactive power.³⁹

Comments supporting the NOPR do not assuage concerns regarding the impact on reliability as they do little more than repeat the Commission's explanation that the NOPR will not have an adverse impact because interconnection agreements impose reactive power obligations on generators.⁴⁰ This narrow view ignores the fact that "[e]liminating a source of stable, expected revenue for generators" can be expected to lead to further retirements, which are already outstripping new generation.⁴¹ The PSEG Companies Comments similarly warned that "the elimination of reactive power

³⁹ Dumais Testimony at 23-24 (footnote omitted).

⁴⁰ See NOPR, 186 FERC ¶ 61,203 at P 43.

⁴¹ Indicated Trade Associations Comments at 18.

compensation may not result in an immediate impact in the short-term; however, system reliability could be adversely impacted in the longer-term."⁴²

In fact, comments on the NOPR highlight that reliability concerns are especially pressing given the retirement of synchronous resources and increased market penetration by inverter-based resources ("IBRs"). For example, one commenter explained that "there are circumstances where generators provide reactive power service within the standard power factor range that is not required by the interconnection agreement," such as "when solar generators provide reactive power service at night, when the generators are not synchronized to the grid, but some inverters are capable of providing reactive power service."⁴³ As noted in the Indicated Trade Associations Comments, transmission owners have also asked solar generators to install the facilities required to provide reactive power at night.⁴⁴ Increasing reliance on non-synchronous resources thus makes it even more important to ensure that generators have incentives to go beyond the bare minimum requirements under their interconnection agreements. This is especially true because generators are a considerably more cost efficient source of reactive power than transmission facilities.⁴⁵

⁴² PSEG Companies Comments at 16.

⁴³ Comments of Glenvale LLC at 7-8, Docket No. RM22-2-000 (filed May 28, 2024) (footnote omitted). *See also* Comments of the Solar Energy Industries Association and the American Clean Power Association at 7, Docket No. RM22-2-000 (filed May 28, 2024); Reactive Service Providers Comments at 40.

⁴⁴ See Indicated Trade Associations Comments at 21 (quoting Initial Comments of D. E. Shaw Renewable Investments, L.L.C., *et al.*, at 23, Docket No. RM22-2-000 (filed Feb. 22, 2022)).

⁴⁵ See Yamit Lavi, Department of Engineering and Public Policy, Carnegie Mellon University, Using PV Inverters for Voltage Support at Night Can Lower Grid Costs ("PV inverters are \$56-\$269/kVAR or 4-15 times less costly than a [static synchronous compensator]"), https://www.cmu.edu/energy/news-multimedia/2021/first-place-poster. See also Yamit Lavi & Jay Apt, Using PV inverters for voltage support at night can lower grid costs (Energy Reports,

Notably, both ISO New England Inc. ("ISO-NE") and New York Independent

System Operator, Inc. ("NYISO") emphasize that reactive power compensation is critical

to their respective efforts to maintain reliability, particularly given increased reliance on

IBRs. ISO-NE explains, in part, that:

the reactive capability that ISO-NE currently procures through Schedule 2 is valuable to improving the transient voltage response of the New England Transmission System, especially in weak areas. This helps assure proper operation of controls for both synchronous and inverter-based ("IBR") generation. Improper operation of these controls may result in unexpected behavior of those generators, including disconnection, which may lead to reliability problems. This is especially important for the evolving New England Transmission System as more IBR generation is interconnected to it, often in weak areas.⁴⁶

Similarly, NYISO states:

With less need to commit thermal resources to meet energy demand, and a potentially higher cost of committing these resources out of market to provide voltage support, it will become more important to incent each resource to provide the maximum MVAr capability to minimize out of market commitments and also to take account of voltage support needs in the day-ahead market solution.⁴⁷

The initial comments thus confirm that the NOPR proposal will have adverse

impacts and should not be adopted.

Vol. 8, Nov. 2022, pp. 6347-6354), https://www.sciencedirect.com/science/article/pii/ S2352484722008502?via%3Dihub; Indicated Trade Associations Comments at 24-26.

⁴⁶ Comments of ISO New England Inc. at 7, Docket No. RM22-2-000 (filed May 28, 2024) (the "ISO-NE Comments").

⁴⁷ Notice of Proposed Rulemaking Comments of the New York Independent System Operator, Inc. at 13, Docket No. RM22-2-000 (filed May 28, 2024) (the "NYISO Comments"). See *also id.* at 11 ("Constraints may continue to be exacerbated in a future where significant renewable generation sources locate in remote areas and require these transmission interfaces to deliver energy to serve load centers. Unnecessarily limiting the transfer capability of these facilities would jeopardize reliable electric service to consumers in New York, while at the same time increasing energy costs for consumers.").

2. The NOPR Unlawfully Denies Generators the Ability to Recover Their Reactive Service Costs, While Discriminatorily Allowing Transmission Owners to Recover Their Costs

Even aside from adversely impacting reliability, the NOPR proposal is unjust, unreasonable, and unduly discriminatory in violation of the requirements of the FPA,⁴⁸ and thus cannot be adopted.

As the Indicated Trade Associations previously explained, the Commission cannot require public utilities to provide a service but then deny them the ability to recover their costs to provide such service, including a return of and on their investment.⁴⁹ The Indicated Trade Associations also explained that generators are unlikely to be able to recover those costs in other ways, a concern that was repeated by others.⁵⁰ For example, NYISO states that it is:

concerned that moving away from its current Voltage Support Service compensation program will unnecessarily introduce difficult compensation issues and, potentially, downstream system reliability issues. Today, NYISO's Voltage Support Service compensation is directly linked to a Resource's capability and obligation to provide reactive power support. Any deviation from the current approach reduces the connection between the reliability service provided and the compensation. At the same time, significant effort would be required to facilitate any new compensation structures.⁵¹

Commenters have also emphasized that, in regions where separate reactive power

compensation has been embedded in the market structure, it is improper and inefficient

⁴⁸ See 16 U.S.C. §§ 824d, 824e (2018).

⁴⁹ See Indicated Trade Associations Comments at 22-24. See also, e.g., Comments of National Grid Renewables Development, LLC, Vistra Corp. and Dynegy Marketing and Trade, LLC at 6-12, Docket No. RM22-2-000 (filed May 28, 2024) (the "Generation Developers Comments").

⁵⁰ See, e.g., Dumais Testimony at 22-23 (explaining that nuclear resources are very unlikely to be able to recover their reactive power costs through energy or capacity sales).

⁵¹ NYISO Comments at 8. *See also id.* at 9-11.

to attempt to assume reactive power costs can be recovered through the energy or capacity markets, which are designed to procure different products. For example, ISO-NE explained that "combining offers to sell multiple products under a single market construct would not achieve an efficient market outcome, and may muddle the underlying incentives and compensation rather than providing transparency."⁵² For their part, the NOPR supporters do nothing to address concerns regarding cost recovery, as they simply repeat the Commission's assertions that generators have other means of cost recovery, but provide little explanation and no evidence.⁵³

Critically, supporters of the NOPR also do not and cannot justify the unduly discriminatory and preferential treatment that will result from the NOPR, which would deny generators cost recovery while permitting transmission owners to recover their costs. While such supporters attempt to rely on the Commission's "comparability standard,"⁵⁴

⁵² ISO-NE Comments at 11. *See also, e.g.*, Generation Developers Comments at 18-19 (explaining that energy and capacity markets are not designed to provide compensation for reactive power).

⁵³ See, e.g., Joint Customers Comments at 16 (claiming that "there is no reason to believe incremental costs of reactive power could not be recovered in the same way other costs are recovered"); Comments of the Joint Consumer Advocates at 7, Docket No. RM22-2-000 (filed May 28, 2024) ("JCA assert that PJM generators will still have a more than ample opportunity to recover the costs associated with their provision of reactive power").

The PJM IMM attempts to support its argument that reactive power compensation is not required by arguing that generators in PJM are obligated to provide primary frequency response but do not receive compensation. See PJM IMM Comments at 8-9. Even leaving aside the unlawfulness of failing to compensate generators for the service they provide, this comparison is inapposite given that, in requiring new facilities to install equipment capable of providing primary frequency response, the Commission expressly stated that "nothing in this Final Rule is meant to prohibit a public utility from filing a proposal for primary frequency response compensation under section 205 of the FPA." *Essential Reliability Servs. and the Evolving Bulk-Power Sys.—Primary Frequency Response*, Order No. 842, 162 FERC ¶ 61,128 at P 126, on clarification and reh'g, 164 FERC ¶ 61,135 at P 22 (2018) (clarifying that the Commission was not mandating compensation but that "it would consider proposals for primary frequency response compensation submitted under section 205 of the FPA").

⁵⁴ See NOPR, 186 FERC ¶ 61,203 at P 4.

the Reactive Service Providers Comments provide a lengthy explanation for why that standard does not justify the NOPR proposal.⁵⁵ Most importantly, there is no valid basis for the Commission to find that both generation and transmission facilities can provide the reactive power necessary to maintain the reliability of the transmission system,⁵⁶ but then only allow transmission providers to recoup their costs.⁵⁷ Indeed, this approach not only grants transmission providers unlawfully preferential treatment, but would also "effectively creat[e] a preference for higher-cost transmission solutions."⁵⁸

II. THE COMMISSION SHOULD WITHDRAW THE NOPR PROPOSAL AND INSTEAD FOCUS ON IMPROVING THE METHODOLOGY USED TO DETERMINE REACTIVE POWER RATES

As explained above, the comments on the NOPR fail to provide evidentiary support necessary to demonstrate that the Commission's existing reactive power compensation policies are unjust or unreasonable, or to establish that it is appropriate, much less necessary, to adopt a rule that would eliminate all reactive power compensation within the standard power factor range. To the contrary, comments by a large number of diverse parties establish that the NOPR proposal should be withdrawn as a matter of law and policy.

⁵⁵ See Reactive Service Providers Comments at 43-48.

⁵⁶ See Order No. 888, 61 FR 21,540 at 21,581 ("We accept NERC's identification of two ways of supplying reactive power and controlling voltage. One is to install facilities, usually capacitors, as part of the transmission system... The second is to use generating facilities to supply reactive power and voltage control.").

⁵⁷ See Indicated Trade Associations Comments at 26-27; PSEG Companies Comments at 17.

⁵⁸ Indicated Trade Associations Comments, Attachment B, Affidavit of Michael Borgatti at 9 (footnote omitted).

Accordingly, the Indicated Trade Associations urge the Commission to withdraw the NOPR proposal and instead refocus its efforts on improving the methodologies used to determine appropriate rates for reactive power, consistent with the objective of the NOI. In particular, the Commission should consider the prior recommendations of the Indicated Trade Associations and others regarding options that could be used to simplify and streamline the ratemaking process, including the adoption of a standardized template and default allocation factors, or the use of a flat rate.⁵⁹ In addition, rather than requiring the blanket elimination of reactive power compensation, the Commission should ensure that each RTO/ISO has the flexibility to adopt an approach that provides the right incentives for continued reactive power investment, tailored to the needs of the region and the overall market design and practices of that particular RTO/ISO.⁶⁰ Drawing from the record in this proceeding, the Commission could provide guidance regarding acceptable reactive power compensation frameworks, such as requiring such frameworks to be reasonably administrable and verifiable, and accommodating of all technology types.⁶¹ What is not acceptable, however, is for an RTO/ISO to simply throw up its hands as PJM has done. Indeed, contrary to PJM's suggestion that reactive power compensation should be eliminated altogether because its stakeholders have not been able to agree on an

⁵⁹ See generally, e.g., Comments of the Electric Power Supply Association, Docket No. RM22-2-000 (filed Feb. 22, 2022).

⁶⁰ Such an approach is consistent with current regional differences. For example, if an area like California fully compensates generation through long-term contracts, separate reactive power compensation may not be required.

⁶¹ Alternatively, an RTO/ISO could procure reactive power only from those generators that it designates as necessary for system reliability, while relieving other generators of the requirement to install reactive power capability, but as stated previously, generators cannot be required to provide this service without compensation.

alternative approach,⁶² the ISO-NE Comments and NYISO Comments demonstrate that RTOs and ISOs have the ability to implement and administer reasonable, region-specific approaches. In fact, ISO-NE and NYISO have both shown that their respective reactive power compensation methodologies help maintain reliability at a reasonable cost and with minimal administrative burdens, and that the NOPR proposal would be counterproductive. The Commission should thus refrain from imposing a "one size fits all" approach and withdraw the NOPR.

⁶² See PJM Comments at 3.

III. CONCLUSION

WHEREFORE, for the foregoing reasons, the Indicated Trade Associations respectfully request that the Commission take these reply comments under consideration in acting on the NOPR.

ELECTRIC POWER SUPPLY ASSOCIATION THE PJM POWER PROVIDERS GROUP

By: <u>/s/ Neil L. Levy</u> Neil L. Levy David G. Tewksbury Stephanie S. Lim McDERMOTT WILL & EMERY LLP The McDermott Building 500 North Capitol Street, NW Washington, DC 20001

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

On behalf of the **Electric Power Supply Association** By: <u>/s/ Glen Thomas</u> Glen Thomas President Laura Chappelle Diane Slifer GT Power Group 101 Lindenwood Drive, Suite 225 Malvern, PA 19355

On behalf of **The PJM Power Providers Group**

NEW ENGLAND POWER GENERATORS INDEPENDENT POWER PRODUCERS ASSOCIATION, INC.

By: /s/ Bruce Anderson Bruce Anderson Senior Vice President & General Counsel **New England Power Generators** Association. Inc. 110 Turnpike Road, Suite 212 Westborough, MA 01581

> On behalf of **New England Power** Generators Association, Inc.

COALITION OF MIDWEST POWER PRODUCERS

/s/ Travis J. Stewart By: Travis J. Stewart Executive Director **Coalition of Midwest Power** Producers 417 Denison Street Highland Park, NJ 08904

> Scott R. Storms Counsel **Coalition of Midwest Power** Producers 5116 N. Capitol Ave. Indianapolis, IN 46208

On behalf of Coalition of Midwest **Power Producers**

Dated: June 26, 2024

OF NEW YORK, INC.

/s/ Gavin J. Donohue By: Gavin J. Donohue President and CEO of IPPNY **Richard Bratton** Director of Market Policy and **Regulatory Affairs** Independent Power Producers of New York 111 Washington Ave, Suite 700 Albany, NY 12210

> On behalf of Independent Power Producers of New York, Inc.