UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Grid Resiliency Pricing Rule) Docket No. RM18-1-000

Office of the Ohio Consumers' Counsel's Comments on Notice of Proposed Rulemaking

BRUCE J. WESTON CONSUMERS' COUNSEL

Kevin F. Moore Assistant Consumers' Counsel **Office of the Ohio Consumers' Counsel** 10 West Broad Street, Suite 1800 Columbus, Ohio 43215-3485

October 23, 2017

I.	Introduction		
II.	Execu	Executive Summary	
III.	THE NOPR FAILS TO DEMONSTRATE A NEED FOR EXPEDITED ACTION ON THE PROPOSED RULE, OR FOR CONSUMERS TO PAY MORE SUBSIDIES FOR COAL AND NUCLEAR RESOURCES IN PJM		
	A.	The Further Study Recommended by the DOE Staff Findings is Needed Before FERC Undertakes a Rulemaking that Could Result in Additional Costly Subsidies Being Paid by Consumers (FERC Staff Question 3 under Other)	9
	В.	The Polar Vortex Events of 2014 were Isolated and Provide No Justification for Expedited Action on the Proposed Rule (FERC Staff Question 2 under Need for Reform).	11
	C.	The Adverse Effects of Extreme Events Are Not Likely to Be Eliminated, or Even Mitigated, by the Subsidies Contemplated by the NOPR (FERC Staff Question 3 under Need for Reform; FERC Staff Question 3 under Fuel Supply Requirement)	17
	D.	Recent and Anticipated Coal and Nuclear Retirements in PJM Are Not Projected to Adversely Affect the Reliability or Resilience of the PJM Grid (FERC Staff Question 4 under Need for Reform)	19
	E.	The NOPR Incorrectly Presumes that Only Coal and Nuclear Resources Provide Services Essential to Maintaining Grid Reliability and Resilience (FERC Staff Questions 1 and 5 under Need for Reform and Question 5 under General Eligibility)	21
IV.	THE PROPOSED RULE COULD DISTORT MARKET CLEARING PRICES AND DETER NEW MARKET ENTRY TO THE DETRIMENT OF CONSUMERS WHO RELY UPON MARKET TO PRODUCE REASONABLE PRICES		
	A.	The Markets, Not FERC, Should Determine Fuel Diversity	23
	В.	Unsubsidized Resources Will Not Be Able to Compete with Subsidized Resources, thus the Subsidies Will Distort Clearing Prices, Discourage Market Entry and Stifle Innovation and New Technology to the Detriment of Consumers (FERC Staff Question 3 under Implementation).	24

V.	INCREASING RATES AND SUBJECTING THEM TO ALWAYS PAYING THE HIGHER OF MARKET-BASED OR COST-BASED RATES				
	A.	The NOPR Will Increase Rates for Consumers by Requiring Them to Pay More Than the Market Otherwise Provides to Retain Old, Uneconomic Generation Resources (FERC Staff Question 4 under Other).	27		
	В.	If FERC Adopts the NOPR, It Should Eliminate Incentives for Arbitrage By Restricting Movement Between Market and Cost Based Rates (FERC Staff Question 5 under Implementation)	28		
	C.	FERC Should Direct PJM to Ensure that Total Revenues Earned by Subsidized Resources Do Not Exceed the Resources' Annual Cost-of-Service Based Revenue Requirements Each Year (FERC Staff Question 2 under Rates).	30		
	D.	FERC Should Direct that Any Subsidized Generation Costs Resulting from the NOPR be Spread Across the Entire PJM Region (FERC Staff Question 3 under Rates)	32		
VI.	MAR	RC PURSUES A FINAL RULE, IT SHOULD REQUIRE KET SOLUTIONS TARGETED AT MINIMIZING ADVERSE CTS ON CONSUMERS AND MARKETS	33		
	A.	FERC Should Require RTOs and ISOs to Develop Market Solutions that Minimize the Cost to Consumers (FERC Staff Question 3 under Other).	33		
	В.	FERC Should Limit Eligibility to Existing Resources Capable of Providing Essential Energy and Ancillary Services (FERC Staff Questions 1, 2 and 5 under General Eligibility; FERC Staff Questions 2 and 3 under Fuel Supply Requirement).	34		
	C.	FERC Should Require PJM to Implement Separate Clearing Mechanisms for Unsubsidized and Subsidized Capacity (FERC Staff Question 2 under Implementation).	35		
	D.	RTOs and ISOs Should Develop Performance Standards for Subsidized Resources and Penalize Non-Performance (FERC Staff Question 4 under Implementation).	35		
VII.		NOPR PROVIDES AN UNREASONABLY SHORT AND EQUATE TIME FOR IMPLEMENTATION AND COMMENT	36		

	A.	RTOs and ISOs Will Need Much More Than 15 Days to Design the Significant Market Rule Changes that Will Be Needed To Implement the NOPR (FERC Staff Question 1 under Other)	
	В.	The NOPR Provides Insufficient Time for Meaningful Comments on the Proposed Rule.	38
VIII.	CONC	CLUSION AND RECOMMENDATIONS	39

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

)

Grid Resiliency Pricing Rule

Docket No. RM18-1-000

Office of the Ohio Consumers' Counsel's Comments on Notice of Proposed Rulemaking

This case is about whether Ohioans and other customers across the country will be made to subsidize uneconomic power plants at a time when Ohioans should be benefitting in their electric bills from lower prices in the competitive generation markets. Making customers pay subsidies to power plant owners is a bad idea. More subsidies are not needed to ensure "resilience and reliability in the generation market." Instead, subsidies will interfere with the market which otherwise will bring lower prices for electric service.

The Office of the Ohio Consumers' Counsel ("OCC") represents the interests of the Ohio retail residential consumers receiving electric service from investor-owned utilities that participate in PJM's wholesale markets. These Ohio residential consumers will be directly and adversely affected by the reforms for wholesale electricity markets proposed in the NOPR.

The Notice of Proposed Rulemaking ("NOPR") issued in this docket by the United States Department of Energy ("DOE") on September 29, 2017, if adopted, will result in unjust, unreasonable and unduly excessive rates for Ohio consumers. It require them to always pay the higher of market or cost-based rates for electricity, transferring to customers the financial risks of

¹ FERC issued a Notice Inviting Comments on the NOPR dated October 2, 2017, and denied numerous requests for an extension of the comment period by Notice Denying Extension of Time dated October 11, 2017.

these uneconomic plants, contrary to policies adopted by the Federal Energy Regulatory Commission ("FERC") in Order No. 719.²

We disagree with the NOPR proposal to require *all* FERC-approved Regional Transmission Organizations ("RTOs") and Independent System Operators ("ISOs") to implement a mechanism that would provide above-market revenues, *i.e.*, subsidies, to certain resources that have 90-day on-site fuel supplies and that have otherwise become uneconomic in the organized wholesale energy and capacity markets. These subsidies will increase electric prices paid by end use customers in the wholesale electricity markets currently operated by PJM. The NOPR could, if adopted, inflict billions in higher electricity costs on the Ohio retail consumers OCC represents, with little benefits in reliability to show for such exorbitant costs. PJM's existing capacity market design, which end use customers pay for, already provides adequate compensation to generators for the fuel assurance and reliability objectives sought in the NOPR. Providing additional compensation would require Ohio consumers to pay twice for the same attributes while lowering the overall reliability of the PJM grid.

We are also concerned about the extremely truncated period for implementation of the NOPR, which contemplates a 40-day comment period, a 30-day period for FERC review of and deliberations on those comments and for development of a final rule, and a 15-day period for development and submission of RTO/ISO compliance filings. This period is excessively short in comparison to other major market reforms undertaken by FERC, and does not allow a meaningful opportunity for customers to be heard. It is also does not provide for the needed careful deliberations and vetting by the RTOs/ISOs, consumers and other industry stakeholders of the market rule changes that will be required to implement the NOPR.

_

² Wholesale Competition in Regions with Organized Electric Markets, Order No. 719 at P 1, FERC Stats. & Regs. ¶ 31,281 at P 1 (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)

I. INTRODUCTION

OCC is the State of Ohio's statutory residential utility consumer advocate. Under Ohio Revised Code Chapter 4911, OCC represents the interests of approximately 4.5 million Ohio residential customers of investor owned utilities in proceedings before state and federal administrative agencies and the courts.

Ohio customers have been afforded retail choice in electricity services since 2001.

Ohio's 1999 law implementing retail choice for electric services³ anticipated that unbundling of generation services and allowing retail consumers to shop for electric power supply would result in market rates that are lower than regulated, cost-based rates. Under Ohio's electric restructuring program, Ohio retail customers can either choose a competitive supplier of electric power, or can choose to remain with their electric utility. A November 2016 study undertaken by Cleveland State University in conjunction with The Ohio State University for the Northeast Ohio Public Energy Council found that Ohio consumers have saved \$15 billion in electricity costs since 2011, and estimated that these savings will total another \$15 billion through 2020.

The Public Utilities Commission of Ohio ("PUCO") reports posted on its website indicate that through the first quarter of 2017, over 53% of Ohio retail customers have switched to competitive retail electric service providers.⁵ The report also indicates that the vast majority of the remaining Ohio retail customers rely on competitive auctions overseen by the PUCO for

_

³ Ohio Senate Bill 3, as passed by the Ohio 123rd General Assembly, 1999, amending RC § 4982.02.

⁴ Electricity Customer Choice in Ohio: How Competition Has Outperformed Traditional Monopoly Regulation at 1, Andrew R. Thomas, William M. Bowen, Edward W. Hill, Adam Kanter and Taekyoung Lim, Energy Policy Center at the Levin College of Urban Affairs, Cleveland State University, undertaken for Northeast Ohio Public Energy Council (November 2016) available at <a href="http://secure-public-

UDp3Sh9Ll21Cs5m8Q3JPBaRwBHvcxJKcpoZK_tRUr7ULNAhdHaqd3PJtIftECObLE3Tw0G3MQFsjtXZIeZDGj Fp-Vk2i9Io_Lh_FTjkJVErqiELWv5JyTWL7L6cyAU9VIGrn0bSIhLfRUXMT4AZIVFC-3MfREPumYk0qbY-Y0aVQlUnXCjGcQVY6Pl1990aJ3b5IJ-

O/http%3A%2F%2Fengagedscholarship.csuohio.edu%2Furban facpub%2F1416%2F

⁵ Report available at https://www.puco.ohio.gov/industry-information/statistical-reports/electric-customer-choice-switch-rates-and-aggregation-activity/electric-switch-rates-by-sales/sales-1q2017/

procuring competitively priced electric services by their local electric utilities ("standard offer service"). The entities offering electric supplies into these state run auctions participate in PJM's wholesale energy and capacity markets to obtain the products they offer into the state auctions. So almost all of Ohio retail consumers depend on well-functioning wholesale markets in PJM to ensure just and reasonable rates for their electricity.

Ohio consumers have already paid billions in stranded costs for the coal and nuclear resources that stand to benefit from the NOPR. Under the retail choice program, Ohio's restructuring law allowed Ohio electric utilities to seek recovery from Ohio retail consumers, both shopping and non-shopping alike, of costs associated with generating resources that were considered stranded investment because of their anticipated inability to compete in the markets.⁷ Ohio consumers have already paid \$14.3 billion between 2000 and 2016 in above-market subsidies approved by the PUCO to Ohio utilities.⁸ An electric utility is to be "fully on its own in the competitive market."9

The subsidy proposed in the NOPR for coal and nuclear plants will only pile onto the costs Ohio retail consumers have already borne. Handing out more of customers' money to the utilities will unjustly allow the power plant owners to reap the upside of competitive markets when those markets provide profits, but transfer the downside risk to Ohio retail customers when those resources are no longer economic in the markets. The additional subsidies

⁶ In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to R. C. 4928.143, in the Form of an Electric Security Plan, PUCO Case No. 13-2385-EL-SSO et al., Opinion and Order at 7-8 (Feb. 25, 2015) ("PUCO Order"), available at http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=681f956b-e3c8-45cd-b6a2-1d8391fc46e0;

⁷ See, e.g., In the Matter of the Application of FirstEnergy Corp. on Behalf of Ohio Edison Company, The Cleveland Electric Illuminating Company, and the Toledo Edison Company for Approval of Their Transition Plans and form Authorization to Collect Transition Revenues, PUCO Case No. 99-1213-EL-ETP, 99-1213-EL-ATA, and 99-1214-EL-AAM, Opinion and Order at p. 71 (July 19, 2000).

⁸ Subsidy Scorecard – Electric Utility Charges to Ohioans, Office of the Ohio Consumers Counsel, available at http://www.occ.ohio.gov/electric/subsidv-scorecard.pdf

⁹ Ohio Rev. Code 4928.38.

contemplated in the NOPR would result in Ohio consumers paying twice for stranded investment in generation plants, contrary to Ohio law and the intent of Ohio lawmakers.

II. EXECUTIVE SUMMARY

We disagree with the wholesale market design changes contemplated by the NOPR for the PJM wholesale markets because of the adverse impact on consumers from the proposed subsidies for uneconomic coal and nuclear generating resources. This adverse impact will undermine competition in PJM's wholesale markets, distort clearing prices in those markets, and eventually deter entry into the PJM markets by newer, cleaner, lower-cost and more efficient generating resources. The NOPR sets forth no justification for putting uneconomic resources in PJM's markets on life support, and for charging Ohio consumers billions in additional subsidies to achieve that objective.

We disagree with the NOPR that *all* RTOs and ISOs have not been doing enough in recent years to address reliability and resilience concerns. PJM consistently has been revising its market rules over the past five years or longer to expressly address these concerns. The NOPR highlights reliability and resilience concerns during the 2014 cold weather events dubbed the Polar Vortex, during other extreme weather events such as Superstorm Sandy in 2012, and in the wake of the significant coal and nuclear plant retirements in recent years and anticipated over the next five years as purported justification for its call to immediate action. However, the NOPR's analysis of these events fails to acknowledge the significant changes to PJM's market rules since 2014 – changes undertaken to explicitly address performance, fuel assurance, resiliency and reliability concerns in that region.

The most important of these market rule changes implemented by PJM and approved by FERC in the wake of the Polar Vortex are the changes to incorporate Capacity Performance

requirements. These rules are designed to provide significant financial incentives for investment in generating resources to rectify concerns about (1) an inadequate penalty structure in PJM's pre-existing market rules to guarantee resource performance; (2) a limited ability under pre-existing market rules to recover the cost of necessary investments to ensure performance and fuel assurance; and (3) the unintended incentive inherent in the pre-existing rules to trim capital improvement plans and operating budgets. PJM also implemented revised rules that allow greater flexibility in hourly energy offers. As discussed in detail below, PJM has repeatedly asserted that these and additional market rule changes, such as the increase to energy offer caps to allow offers reflecting actual costs that exceed the \$1,000 per/MWh cap to set energy clearing prices, are adequately addressing the effects of plant retirements that have occurred in recent years and are anticipated to occur over the next five years. While PJM might agree that there is marginal room for improvement in its market rules regarding compensation for resilience, ongoing efforts in the PJM stakeholder process are timely addressing resource flexibility and resilience concerns.

There simply is no evidence that current levels of reliability and resilience in the PJM markets require the immediate and radical changes to the fundamental market designs contemplated by the NOPR. Moreover, to the extent additional subsidies are needed to keep certain uneconomic plants operating to address reliability concerns, PJM's Open Access

¹⁰ PJM Interconnection, LLC, 151 FERC ¶ 61,208 at P 44 (2015) ("Capacity Performance Order").

¹¹ *PJM Interconnection, LLC*, 158 FERC ¶ 61,133 (2017) (accepting subject to certain modifications PJM's proposed rules to allow hourly flexibility in energy offers).

¹² Energy Price Formation and Valuing Flexibility, PJM Interconnection, LLC ((June 15, 2017), available at

¹² Energy Price Formation and Valuing Flexibility, PJM Interconnection, LLC ((June 15, 2017), available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjJ8drM 6obXAhVqilQKHdA9A8cQFggpMAA&url=http%3A%2F%2Fwww.pjm.com%2F~%2Fmedia%2Flibrary%2Freports-notices%2Fspecial-reports%2F20170615-energy-market-price-formation.ashx&usg=AOvVaw2Z3nuxj-OXJiLoZZYPyHpF.

¹³ Resilience Roadmap, PJM Interconnection, LLC (June 2017), available at http://www.pjm.com/~/media/committees-groups/committees/oc/20170606/20170606-item-18-resilience-roadmap.ashx

Transmission Tariff ("Tariff") provides for that mechanism through Reliability Must Run ("RMR") arrangements. The NOPR ignores the existing tools and on-going efforts in PJM's markets, and thus fails to justify the expedited treatment requested to upend the current competitive market design inherent in PJM's market rules. FERC should reject the proposed rule in favor of a more measured approach that carefully studies the extent to which PJM and other individual RTO and ISO wholesale market rules may need additional reforms to achieve the NOPR objectives of reliable and resilient electricity service at just and reasonable rates for all consumers.

III. THE NOPR FAILS TO DEMONSTRATE A NEED FOR EXPEDITED ACTION ON THE PROPOSED RULE, OR FOR CONSUMERS TO PAY MORE SUBSIDIES FOR COAL AND NUCLEAR RESOURCES IN P.JM

The NOPR proposes that FERC adopt a final rule requiring FERC-approved RTOs and ISOs with energy and capacity markets and a tariff that contains a day-ahead and a real-time market or the functional equivalent, to establish a tariff that provides "a just and reasonable rate" for the "(1) [p]urchase of electric energy from an eligible reliability and resiliency resource; and (2) recovery of costs and a return on equity for such resources dispatched during grid operations." The NOPR also proposes that the "just and reasonable rate shall include pricing to ensure that each eligible resource is fully compensated for the benefits and services it provides to grid operations, including reliability, resiliency and on-site fuel-assurance, and that each eligible resource recovers its fully allocated costs and a fair return on equity." Finally, eligible resources are defined as those (a) physically located within a FERC-approved RTO or ISO; (b) able to provide essential energy and ancillary reliability services, including but not limited to voltage support, frequency services, operating reserves, and reactive power; (c) having 90-day

_

¹⁴ Grid Resiliency Pricing Rule, Notice of Proposed Rulemaking, 82 Fed. Reg. 46940, 46,948 (October 10, 2017) (proposing revisions to 18 C.F.R. § 35.28) (hereinafter "NOPR").

fuel supplies on site enabling them to operate during an emergency, extreme weather conditions, or a natural or man-made disaster; (d) compliant with all applicable federal, state, and local environmental laws, rules, and regulations; and (e) not subject to cost of service rate regulation by any state or local regulatory authority.¹⁶

Under current market operations, the proposed rule would limit eligibility for subsidy payments to resources with a 90-day on-site fuel supply. This would mean that nuclear and perhaps some coal and oil-fired generating facilities would be the chosen winners. Moreover, the requirement for full compensation of all costs, including a return on equity, indicates that the NOPR contemplates guaranteed payments, funded by consumers, to these resources regardless of otherwise applicable market clearing prices.

It is no secret in the industry, as recognized in the NOPR,¹⁷ that some coal and nuclear resources today are not clearing in PJM's wholesale energy and capacity markets due to increasing market participation by more efficient lower-cost natural gas resources. FirstEnergy's 10K report submitted to the Securities and Exchange Commission in 2017 demonstrates the effect on its uneconomic resources of the increasing prevalence of low-cost natural gas supplies in PJM's markets:

the energy and capacity markets continue to be weak, as evidenced by the significantly depressed capacity prices from the 2019/2020 PJM Base Residual Auction in May of 2016, as well as the current forward pricing and the long term fundamental view on energy and capacity prices, which resulted in a non-cash pre-tax impairment charge of \$800 million (\$23 million at FES [FirstEnergy Solutions]) recognized in the second quarter of 2016 representing the total amount of goodwill at CES [FirstEnergy's Competitive Energy Services operations]. ¹⁸

¹⁶ *Id*.

¹⁷ *Id.* at 46,943.

¹⁸ FirstEnergy Corporation's Form 10K Annual Report for the period ending 12/31/2016 at 4 (February 21, 2017) ("FirstEnergy 2016 10K").

The fact that coal and nuclear plants may be uneconomic in today's wholesale markets does not warrant the dramatic changes in how electricity rates in PJM's markets are set as contemplated by the NOPR – changes that would impose hundreds of millions (if not billions) of dollars of extra costs on Ohio customers.

Current regulatory paradigms for setting electricity rates are based primarily on either a market-based approach, *e.g.*, the current wholesale markets in PJM, or a cost-of-service based approach, *e.g.*, the mechanisms used to set rates in non-retail choice states like West Virginia, Virginia, and many parts of the Midwest. The NOPR contemplates a hybrid market-based/cost-based approach for setting electricity rates in PJM – a dramatic shift from the current market-based rate approach that forms the bedrock of PJM's wholesale markets. This hybrid approach will distort wholesale market prices and increase costs for consumers for the same or lower levels of reliability, resilience and fuel assurance that they receive today. The NOPR sets forth no reason to move forward with this radical change in the design of PJM's markets in such an extremely short timeframe.

A. The Further Study Recommended by the DOE Staff Findings is Needed Before FERC Undertakes a Rulemaking that Could Result in Additional Costly Subsidies Being Paid by Consumers (FERC Staff Question 3 under Other).

The NOPR relies extensively on facts and events discussed in the August 2017 Staff Report to the Secretary on Electricity Markets and Reliability. These include concerns about extreme weather and geomagnetic disturbance events, the extent of coal and nuclear resource retirements in the recent past and projected into the near future, and other grid resiliency concerns.¹⁹ However, the NOPR ignores the explicit DOE staff policy recommendations

9

-

¹⁹ NOPR, 82 Fed. Reg. at 46,942-93.

reflected in that report that are primarily focused on the need for additional study in the industry for solutions to these concerns:

- Expedite efforts with states, RTOs, ISOs and other stakeholders to improve energy price formation in centrally organized, wholesale electricity markets;
- Study valuation mechanisms for new and existing essential reliability services that compensate grid participants for services necessary to support reliable grid operations;
- Support efforts to enhance grid resilience, including transmission enhancements;
- *Promote research and development* into new technologies for enhancing grid reliability and resilience;
- Accelerate and reduce costs for infrastructure development, including new hydropower, nuclear and coal resources;
- Support increased gas-electric coordination; and
- Conduct further study of mechanism that would enable "equitable, value-based remuneration for desired grid attributes such as ERS [essential reliability services], fuel availability, high resilience, low emissions, flexibility, etc. with alternative market and non-market structures."

FERC should recognize that the DOE Staff Report does not recommend immediate action to have customers subsidizing uneconomic coal and nuclear resources, but rather recommends additional study of possible market and non-market structures that could achieve the objectives of improving grid reliability and resilience. Before compensation mechanisms can be designed, additional study is needed to determine the scope of the problem, the extent to which current market rules may be inadequate to remedying any concerns, and the most appropriate means for providing additional compensation if needed. The NOPR has not justified an immediate and radical change to existing wholesale market designs that will convert the existing competitive market approach to a hybrid market-based/cost-based rate approach, and whose impacts on competitive markets and consumers are not well understood. FERC should adopt instead the approach recommended in the DOE staff report -- continued careful study of changing market

10

²⁰ Staff Report to the Secretary on Electricity Markets and Reliability at 126-28, United States Department of Energy (August 2017) (emphasis added) (hereinafter "DOE Staff Report").

dynamics, identification of any needed reliability or resilience reforms, and pricing options for best achieving any needed reforms.

B. The Polar Vortex Events of 2014 were Isolated and Provide No Justification for Expedited Action on the Proposed Rule (FERC Staff Question 2 under Need for Reform).

The NOPR claims that the Polar Vortex events during the winter of 2014 exposed problems with the resilience of the electric grid, citing the fact that American Electric Power reported deploying 89% of its coal units scheduled for retirement to meet demand during that period. The NOPR concludes that 65 million people within the PJM footprint could have been affected if these units had not been available, implying that the subsidies proposed in the NOPR are needed to keep these coal resources available. However, the NOPR ignores several critical aspects of the Polar Vortex and the subsequent changes to PJM's market rules implemented, since 2014, in an explicit effort to remedy the problems exposed by that event.

First, the 2014 Polar Vortex was an isolated, extreme weather event, resulting in PJM experiencing during January 2014 eight of the ten highest winter demands for electricity on the PJM system. ²³ It was not the lack of sufficient capacity in the PJM region during the winter of 2014 that caused reliability concerns in PJM. As demonstrated in the chart below, PJM had more than sufficient capacity in its region to satisfy all consumer needs and provide required reserves [Installed Reserve Margin] of 15-16.6% above those needs in 2014 and in every year it has run capacity auctions under its Reliability Pricing Model ("RPM") capacity market rules. PJM's report on the results for the most recent RPM Base Residual Auction ("BRA") in the

²¹ NOPR at 46,942.

2014-cold-weather-events.ashx & usg = AOvVaw1SPaoTWSVUpzy1MUdv9BkG.

 $^{^{22}}$ Id.

²³ Analysis of Operational Events and Market impacts During the January 2014 Cold Weather Events at 32, PJM Interconnection, LLC (May 8, 2014) (hereinafter "PJM Polar Vortex Report"), available at available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjb8Kb-9PrWAhUKwVQKHZZHBjcQFggmMAA&url=http%3A%2F%2Fwww.pjm.com%2F~%2Fmedia%2Flibrary%2Fr eports-notices%2Fweather-related%2F20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-

unconstrained Rest of Market region, run in May 2017, indicates that, for each of the 14 Delivery Years for which the annual Base Residual Auction has been run under the RPM rules, PJM has cleared capacity resources well above the required Installed Reserve Margin ("IRM") *in every year*:

Delivery	PJM IRM ²⁴	RPM Actual Reserve	RPM Clearing Price for
Year		Margin ²⁵	Unconstrained Region ²⁶
2007/2008	15.0%	19.1%	\$40.80
2008/2009	15.0%	17.4%	\$111.92
2009/2010	15.0%	17.6%	\$102.04
2010/2011	15.5%	16.4%	\$174.29
2011/2012	15.5%	17.9%	\$110.00
2012/2013	15.6%	20.5%	\$16.46
2013/2014	15.9%	19.7%	\$27.73
2014/2015	15.9%	18.8%	\$125.99
2015/2016	15.3%	19.3%	\$136.00
2016/2017	15.6%	20.3%	\$59.37
2017/2018	15.7%	19.7%	\$120.00
2018/2019	15.7%	19.8	\$164.77
2019/2020	16.5%	22.4%	\$100.00
2020/2021	16.6%	23.3%	\$76.53

PJM had more than sufficient capacity resources in the region to withstand the extreme weather conditions experienced in 2014. In fact, PJM experienced even colder winter weather during the winter of 2015 with no adverse operational or reliability effects in its markets.²⁷

The problems experienced in PJM's markets during the 2014 Polar Vortex stemmed from the fact that more than 40,000 MWs of capacity in PJM, most of which was receiving RPM

²⁴ IRM data is taken from PJM RPM Auction Planning Period parameters, *available at* http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2020-2021-bra-planning-period-parameters.ashx?la=en. Beginning with the 2012/2013 Delivery Year, the IRM is subject to change based on updated study results – the data above reflect the updated results.

²⁵ 2020/2021 Base Residual Auction Report at 6, *available at* http://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx?la=en.

²⁷ 2015 Winter Report at 5-6, PJM Interconnection, LLC (May 13, 2015) ("2015 inter Report"), available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjJqYbowP3WAhUJ_4MKHWk1DI0QFggvMAE&url=http%3A%2F%2Fwww.pjm.com%2F-%2Fmedia%2Flibrary%2Freports-notices%2Fweather-related%2F20150513-2015-winter-report.ashx%3Fla%3Den&usg=AOvVaw0VJFePW5Cui6oRbZdh5TqZ.

capacity payments, failed to start when called upon during the extreme weather conditions in January 2014.²⁸ PJM experienced a forced outage rate on January 7, 2014 of 22%, well above its normal level of forced outages.²⁹ Approximately 34% or 13,700 MW of those failures to perform were coal-fired resources.³⁰ In contrast, natural gas fuel supply interruptions accounted for only 25% of the total forced outages during that period.³¹

PJM nevertheless reliably served all customer demand on the system, meeting an all-time record winter peak of 141,846 MW at 7:00 p.m. January 7 with no reliability issues.³² In other words, the 19.7% level of capacity reserves that cleared the 2013/2014 Delivery Year RPM capacity auction, in conjunction with imports and available demand response, provided sufficient reserves to serve the historic peak load in January 2014 *notwithstanding the loss of 40,000 MW of capacity*. The PJM markets provided reliability and resilience to consumers during this historic weather event.

Second, the conditions in January 2014 were highly atypical. Although winter temperatures were even lower in February 2015, PJM's forced outage rate improved considerably to 13.4%, closer to PJM's historical average forced outage rate of 7-10%. During February 2015, PJM experienced peak load levels that were even higher than those experienced during January 2014. But unlike in January 2014, generator outage rates were much closer to normal, system emergency conditions were not triggered because ample reserves were available, locational marginal prices ("LMPs") were within reason, and balancing operating reserves were closer to normal winter peak levels. In other words, the crisis that emerged during January

²⁸ PJM Polar Vortex Report at 26.

²⁹ *Id.* at 24.

³⁰ *Id.* at 25.

³¹ *Id.* at 26.

³² *Id.* at 5.

³³ 2015 Winter Report at 18-19.

³⁴ *Id.* at 6.

2014 did not emerge during even higher peak loads and colder temperatures in February 2015. Although PJM was able to reliably serve customers during the 2015 extreme cold weather event, the forced outage rate for coal plants was even higher than in the winter of 2014, with coal plant forced outages totaling 10,244 MWs, or 41% of all forced outages during that period. In contrast, natural gas outages due to fuel supply interruptions totaled only 7,420 MW, or 30% of all forced outages in that period.³⁵

Third, the NOPR fails to recognize that the regulatory reforms adopted by PJM in the wake of the Polar Vortex remedied many of the operational concerns experienced in 2014. In its 2015 Winter Report, PJM stated that "[t]he performance improvements of winter 2015 over 2014 are attributable to steps PJM and generation owners initiated after the winter of 2014 experience: pre-winter operational testing for dual-fuel and infrequently run units, a winter preparation check-list program; better communication of fuel status and increase coordination with natural gas pipelines. PJM also implemented changes to its energy offer price caps that allowed verifiable cost in excess of the \$1,000 per MWh energy offer price cap to LMP, thus allowing spikes in the cost of fuel supplies to set higher energy market clearing prices for all resources. Additionally, PJM implemented revised rules that allow greater flexibility in hourly energy offers.

-

³⁵ *Id.* at 21.

³⁶ *Id.* at 5-6.

³⁷ *PJM Interconnection, LLC*, 150 FERC ¶ 61,020 (2015) (accepting PJM's proposal to allow verified cost-based energy offers to set LMPs up to a cap of \$1,800 per MWh); *order on reh'g*, 152 FERC ¶ 61,099 (2015); *see also PJM Interconnection, LLC*, 153 FERC ¶ 61,289 (2015) (accepting PJM's proposal to allow verified cost-based energy offers to set LMPs up to a cap of \$2,000 per MWh).

³⁸ *PJM Interconnection, LLC*, 158 FERC ¶ 61,133 (2017) (accepting subject to certain modifications PJM's proposed rules to allow hourly flexibility in energy offers).

More recently, PJM, in conjunction with stakeholders, has begun to address resource flexibility³⁹ and resilience concerns.⁴⁰ In June 2017, PJM announced that it would be engaging in efforts with stakeholders to refine price formation rules in its energy markets to address concerns regarding large, inflexible units, often referred to as baseload resources, during certain pricing intervals.⁴¹ PJM also announced plans that month to engage stakeholders in efforts to address resilience concerns, including operational reforms in which PJM would commit additional reserves or operate the system in a manner that would be based on more conservative operating assumptions.⁴²

The NOPR also fails to consider the significant changes introduced with PJM's implementation of Capacity Performance rules in 2015. PJM stated in its filing in that proceeding that the reforms proposed would ensure that "resources committed as capacity to meet the PJM Region's reliability needs will deliver the promised energy and reserves when called upon in emergencies, providing the reliability that the region expects and requires. PJM also stated that the proposed rules would "virtually eliminate[ing] the current excuses for Capacity Resource non-performance, leaving only certain narrowly-drawn exceptions for actions specifically approved or directed by PJM," and recognize the higher performance risk imposed on Capacity Performance resources by increasing capacity offer caps to the net cost of new entry ("net-CONE"), even for existing resources, and by allowing offers above net-CONE where the

3

³⁹ Energy Price Formation and Valuing Flexibility, PJM Interconnection, LLC ((June 15, 2017), available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjJ8drM 6obXAhVqilQKHdA9A8cQFggpMAA&url=http%3A%2F%2Fwww.pjm.com%2F~%2Fmedia%2Flibrary%2Freports-notices%2Fspecial-reports%2F20170615-energy-market-price-formation.ashx&usg=AOvVaw2Z3nuxj-OXJiLoZZYPyHpF.

⁴⁰ Resilience Roadmap, PJM Interconnection, LLC (June 2017), available at http://www.pjm.com/~/media/committees-groups/committees/oc/20170606/20170606-item-18-resilience-roadmap.ashx

⁴¹ Energy Price Formation and Valuing Flexibility at 2-4.

⁴² *Id.* at 6.

⁴³ PJM Interconnection, LLC, Docket No. ER15-623-000, Transmittal Letter at 2 (December 12, 2014).

seller can demonstrate that the costs of improving resource performance, including firm fuel costs and documented and verifiable expenses solely attributable to the risks of offering Capacity Performance Resources, exceed that value. 44 PJM explained that the proposed rule also would rectify concerns that the prior rules did not allow recovery of "fuel assurance costs," by allowing inclusion of firm fuel costs and documented verifiable expenses associated with upgrades needed to ensure compliance with the performance requirements in capacity offers. ⁴⁵ FERC approved this proposal, and PJM's Capacity Performance rules have been in place since 2015. 46

Moreover, FERC has determined that where tariff rules impose strict performance obligations on capacity resources, those resources "may not take 'economic' outages, including outages based on economic decisions not to procure fuel or fuel transportation."⁴⁷ Because PJM's Tariff and FERC policy require performance and fuel assurance, PJM's market design already satisfies the reliability, performance and fuel assurance objectives sought in the NOPR.

Since implementation of Capacity Performance, PJM's forced outage rates during the 2016 winter have averaged only 4%, a significant improvement over the 2014 Polar Vortex and 2015 experiences. 48 While PJM's reforms of its energy and capacity market rules since the extreme cold weather events in 2014 and 2015 have significantly improved overall performance of resources in the region, coal resources still struggle with high outage rates during cold weather months. Coal resource forced outages during the 2016 winter totaled 9,191 MW or 58% of all

⁴⁴ *Id*.

⁴⁵ *Id*.at 2, 10-12.

⁴⁶ *PJM Interconnection, LLC,* 151 FERC ¶ 61,208 (2015); orders on reh'g, 155 FERC ¶ 61,157 (2015) and 155 FERC ¶ 61,260 (2015); affirmed sub nom, Advanced Energy Management Alliance v. FERC, 860 F.3d 656 (D.C.

⁴⁷ Centralized Capacity Markets in Regional Transmission Organizations and Independent System Operators, et al., 149 FERC ¶ 61,145 at P 11 (2014), citing New England Power Generators Association, Inc. v. ISO New England, *Inc.*, 144 FERC¶ 61,157 at P 27 (2013).

⁴⁸ 2016 Winter Report at 1, PJM Interconnection, LLC (May 31, 2016).

forced outages in this period.⁴⁹ Additionally, retiring resources in PJM experience forced (unplanned) outage rates of 31%, significantly higher than the PJM average for all resources.⁵⁰

Retention of old uneconomic coal and nuclear resources, through the subsidies proposed in the NOPR, would result in a less reliable, not a more reliable, grid. The NOPR proposes to subsidize these uneconomic coal resources that might otherwise retire for their full annual costs of remaining operational in the market notwithstanding their high level of forced outages when needed most during extreme weather events. The NOPR's outcome would force Ohio consumers to pay even higher charges for uneconomic lower-performing resources. This proposal is not just and reasonable on its face.

C. The Adverse Effects of Extreme Events Are Not Likely to Be Eliminated, or Even Mitigated, by the Subsidies Contemplated by the NOPR (FERC Staff Question 3 under Need for Reform; FERC Staff Question 3 under Fuel Supply Requirement).

There also is no merit to the NOPR's proposal that subsidies for uneconomic coal and nuclear resources are needed to ensure reliability and resilience during hurricanes, earthquakes and geomagnetic disturbance events. Although hurricanes can affect some low-lying generation resources, the vast majority of electric grid facilities damaged by hurricanes are the energy delivery facilities --transmission and distribution lines. For example, the North American Electric Reliability Corporation ("NERC") Hurricane Sandy Event Analysis Report indicated that PJM lost only 9,586 MW of generating capacity during that hurricane, dubbed Superstorm Sandy, in October 2012.⁵¹ Total capacity eligible for participation in PJM's capacity auction for that delivery year exceeded 153,000 MW.⁵² Thus, the outages due to Superstorm Sandy totaled

⁵⁰ 2015 Winter Report at 18.

⁴⁹ *Id*. at 9.

⁵¹ Hurricane Sandy Event Analysis Report at 5, n.1, North American Electric Reliability Corporation (January 2014) ("NERC Report"). 52 2012/2013 RPM Base Residual Auction Results at 5, available at http://www.pjm.com/-/media/markets-

ops/rpm/rpm-auction-info/2012-13-base-residual-auction-report-document-pdf.ashx?la=en.

only 6.2% of total eligible capacity in the region during that storm. 53 This loss was largely offset by the fact that PJM's capacity auction for that delivery year cleared almost 21% reserves above peak demand for that delivery year,⁵⁴ as well as the fact that transmission and distribution outages would have rendered that available generator capacity undeliverable in any event.

Providing subsidies to uneconomic coal and nuclear resources to keep them on-line during hurricanes will not significantly affect forced outage rates during such events, and are not likely to increase grid reliability and resilience if the power being generated cannot be delivered to consumers. Coal supplies can become frozen in cold weather conditions or flooded during hurricanes and other extreme weather events, rendering them unusable. There are no guarantees that the owners of the subsidized resources would invest in improvements to better protect the resources against such extreme weather events. Moreover, it took the transmission utilities in PJM over 31 days to restore service to all customers in the region in the wake of Superstorm Sandy, 55 thus even if the generating resource outages could have been avoided, there was no guarantee the power could have been delivered to consumers.

For similar reasons, subsidies for uneconomic coal and nuclear resources will not guarantee that the owners of these resources will use those funds to invest in protecting resources against earthquakes, terrorist attacks, or geomagnetic disturbances. Moreover, even if the subsidies are invested in shoring up the physical capacity of the generating facilities, they will do nothing to reduce the vulnerability to attack and earthquakes experienced by transmission and distribution systems.

 $^{^{53}}$ *Id.* at 14. 54 2012/2013 RPM Base Residual Auction Results at 5.

⁵⁵ NERC Report at 6.

D. Recent and Anticipated Coal and Nuclear Retirements in PJM Are Not Projected to Adversely Affect the Reliability or Resilience of the PJM Grid (FERC Staff Question 4 under Need for Reform).

There is also no merit in the NOPR's concern that premature retirements of coal and nuclear generation will threaten the reliability and resilience of the bulk power system in PJM. As noted in section III.A above, PJM capacity markets are explicitly designed to clear more capacity than is required to meet consumer needs plus a required reserve margin in each and every year. While PJM has determined that it need only have installed reserves of 15-16.6% above forecasted peak loads in the region, in each and every delivery year since it implemented RPM in 2006, PJM's capacity auctions have cleared well in excess of its reliability requirement. For example, the auction run in May 2017 cleared 23% reserves when PJM determined that 16.6% reserves would reliably satisfy consumer needs in the 2020/2021 delivery period.

FERC noted in its order approving PJM's Capacity Performance rules that since 2008, and projecting forward to 2019, over 26,000 MW of coal and oil-fired generation resources have retired or will retire in PJM. ⁵⁶ The vast majority of that generation had already retired as of 2014, and those retirements have already been accounted for in the capacity auctions held in and since 2015. Even under capacity market rules in place before implementation of Capacity Performance, PJM had significant new generation offering into the auctions, and its capacity market cleared more than 25,825 MWs of new generation in the last six annual auctions, adding an average of more than 4,000 new MWs of generation each delivery year. ⁵⁷

It is no surprise that PJM has consistently maintained that its system is reliable notwithstanding the significant coal and nuclear retirements in past years and the potential for additional coal and nuclear retirements in future years. In its Brief for Amicus Curiae filed in the

⁵⁶ PJM Interconnection, LLC, 151 FERC 61,208 at P 43.

⁵⁷ 2020/2021 RPM Base Residual Auction Report at 2.

FirstEnergy state subsidy proceedings pending before the PUCO in Case No. 14-1297-EL-SSO, PJM debunked FirstEnergy's generalized claims about the adverse effect on electric system reliability that would be posed if another state subsidy proposal were not accepted by the PUCO and FirstEnergy retired the 3,000 MWs of capacity at issue there, stating that "such concerns are categorically unfounded." PJM reported that even if FirstEnergy were to retire 3,000 MW of coal and nuclear capacity in Ohio, "due to PJM's robust forward capacity market and regional transmission planning process, generation retirements have been absorbed and the generation replaced with newer resources as resource adequacy targets have been met and exceeded year after year." PJM further reported that there has been significant new generation entry that has consistently kept PJM's reserve margins on target, and substantial new generating capacity totaling 4,335 MW were under construction in or proposed for Ohio in 2016. PJM's Amicus Brief provides evidence starkly contradicting the NOPR's premise that anticipated coal and nuclear retirements in PJM raise immediate reliability or resilience concerns that warrant the subsidy remedy proposed in the NOPR.

Even if there were any merit to concerns that coal and nuclear retirements in PJM could lead to reliability or resilience concerns, those concerns are already adequately addressed by the existing PJM Tariff. In its Amicus Brief, PJM stated that its Tariff contains provisions allowing compensation for RMR resources that have announced plans to retire but that PJM has determined are needed for reliability until either transmission solutions or new generation can

-

⁵⁸ In the Matter of the Application Seeking Approval of Ohio Edison Company, the Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. § 4928.143 in the Form of an Electric Security Plan, PUCO Case No. 14-1297-EL-SSO, Brief for Amicus Curiae PJM Interconnection, LLC, at 9 (February 16, 2016) ("PJM Amicus Brief"), available at http://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=8f056d2a-06a6-47a9-bb02-03e8aa62e406.

⁵⁹ PJM Amicus Brief at 10, citing Direct Testimony of James F. Wilson on Behalf of the Ohio Consumers' Counsel, November 22, 2015 at 42.

⁶⁰ *Id.* at 10, n.16.

come on line.⁶¹ PJM further stated that it has had to implement RMR contracts "infrequently even in spite of the magnitude of retirements that have occurred over recent years, requiring the extended operation of only 994 MW of resources in Ohio for up to two and a half years," notwithstanding the retirement of more than 6,000 MW of capacity located in Ohio since 2010.⁶²

The PUCO eventually did approve additional generation subsidies for Dayton Power & Light⁶³ and AEP.⁶⁴ The NOPR now would pile on significant federal subsidies, exacerbating the cost to Ohio consumers to keep these FirstEnergy and AEP plants operating beyond their economic service lives. In the absence of any evidence that these resources are actually needed in PJM for the reliability and resilience of the PJM regional grid, imposing additional subsidies on Ohio consumers will not result in just and reasonable rates for Ohioans.

E. The NOPR Incorrectly Presumes that Only Coal and Nuclear Resources Provide Services Essential to Maintaining Grid Reliability and Resilience (FERC Staff Questions 1 and 5 under Need for Reform and Question 5 under General Eligibility).

The NOPR requires FERC to take immediate action to ensure the reliability and resilience attributes of generation with on-site fuel supplies are fully valued. That proposal appears based on the incorrect premise that natural gas resources and other non-coal and non-nuclear resources cannot supply essential reliability and resilience services. However, that presumption is not well-founded. Recognizing the technological developments in the industry in recent years, FERC issued a NOPR in November 2016 in Docket No. RM16-6 proposing to require all newly interconnected small generating facilities to provide primary frequency

⁶¹ PJM Amicus Brief at 11.

⁶² *Id*.

⁶³ In the Matter of the Application of the Dayton Power & Light Company To Establish a Standard Service Offer in the Form of an Electric Security Plan, PUCO Case No. 16-395-EL-SSO, Opinion and Order at 34-35 (October 20, 2017), available at https://dis.puc.state.oh.us/TiffToPDf/A1001001A17J20B21255J00544.pdf.

In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter Into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider, PUCO Case No. 14-1693-EL-RDR, Second Entry on Rehearing at 27 (November 3, 2016), available at http://dis.puc.state.oh.us/TiffToPDf/A1001001A17H30B64838A00726.pdf.

response capability, one of the essential reliability services contemplated in the DOE NOPR.⁶⁵ The decision on that NOPR remains pending before FERC.

Additionally, in a report prepared in March of this year regarding the effects of its evolving resource mix on system reliability, PJM found that its current resource profile is both reliable and diverse, and that its expected near-term resource portfolio is among the highestperforming portfolios and is well equipped to provide generator reliability attributes.⁶⁶ In fact. the study found that PJM could rely on as much as 86% natural gas-fired resources in its resource portfolio and still maintain operational reliability.⁶⁷ PJM also reported that more diverse portfolios are not necessarily more reliable; rather, there are resource blends between the most diverse and least diverse portfolios that provide the most generator reliability attributes.⁶⁸ In other words, PJM found that the types of resilience attributes that can be provided differ according to fuel type. For example, the inflexibility of large baseload resources like coal plants cannot provide some of the more flexible services required for resilience. Additionally, PJM noted that a portfolio dependent on 86% natural gas-fired resources might raise concerns about electric system resilience, but stated that current criteria for resilience are not well defined or quantified.⁶⁹ PJM proposed continued study of those concerns, in conjunction with stakeholders, to better define and value resilience attributes.⁷⁰

-

⁶⁵ Essential Reliability Services and the Evolving Bulk Power System – Primary Frequency Response, Notice of Proposed Rulemaking, 157 FERC ¶ 61,122 (2016).

⁶⁶ PJM's Evolving Resource Mix and System Reliability at 3, PJM Interconnection, LLC (March 30, 2017) ("PJM Fuel Diversity Study"), available at

http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjNhPDiw_vWAhXCgFQKHfGQCrUQFggpMAA&url=http%3A%2F%2Fwww.pjm.com%2F~%2Fmedia%2Flibrary%2Freports-notices%2Fspecial-reports%2F20170330-pjms-evolving-resource-mix-and-system-reliability.ashx&usg=AOvVaw15SgOR2VH4T2C0lnqouBs.

⁶⁷ PJM Fuel Diversity Study at 4-5.

⁶⁸ *Id.* at 5.

⁶⁹ *Id.* at 5-6.

⁷⁰ *Id*.

PJM's recommendation regarding the need for on-going stakeholder efforts to study resilience dovetails with the DOE Staff Report recommendation that FERC continue efforts with the industry to better identify mechanisms for providing essential reliability services and options for compensating resources for such services. PJM's Fuel Diversity Study, conducted in March 2017, and the issuance of its Resilience Roadmap in June 2017 demonstrate that the industry is not ignoring reliability and resilience concerns, but rather is actively engaged in researching the concerns and attempting to develop market solutions to ensure the reliability and resilience of the grid. OCC recommends that FERC foster these efforts rather than truncate them by adopting the proposed rule in the NOPR.

IV. THE PROPOSED RULE COULD DISTORT MARKET CLEARING PRICES AND DETER NEW MARKET ENTRY TO THE DETRIMENT OF CONSUMERS WHO RELY UPON MARKET TO PRODUCE REASONABLE PRICES.

A. The Markets, Not FERC, Should Determine Fuel Diversity.

The manner in which the proposed rule will be implemented is unknown at this time because the NOPR leaves implementation details to the RTOs and ISOs. If the NOPR results in outright subsidies or above-market revenues for uneconomic coal and nuclear resources, the same issues that have arisen associated with state subsidies are likely to occur in the context of the proposed federal subsidies. Such subsidies are likely to bring renewed calls for revised minimum offer price floors, which raise a host of concerns regarding the ability of vertically integrated local distribution companies to continue to self-supply their capacity obligations in these organized wholesale markets. To benefit consumers, FERC should not be in the business of picking winners and losers in the organized wholesale markets. FERC fostered the

_

⁷¹ See, e.g., PJM Interconnection, L.L.C., 143 FERC ¶ 61,090 (2013); order on reh'g, 153 FERC ¶ 61,066 (2015) (creating exemptions from the MOPR for certain self-supplied and competitive entry resources), vacated and remanded sub nom, NRG Power Marketing LLC v. FERC, 862 F.3d 108 (D.C. Cir. 2017); and Calpine Corporation, et al., v. PJM Interconnection, LLC, Docket No. EL16-49-000 (ruling on request to extend the MOPR to certain subsidized existing resources pending).

development of these markets in order that the competitive market would make those decisions consistent with sound economic principles.

B. Unsubsidized Resources Will Not Be Able to Compete with Subsidized Resources, thus the Subsidies Will Distort Clearing Prices, Discourage Market Entry and Stifle Innovation and New Technology to the Detriment of Consumers (FERC Staff Question 3 under Implementation).

There is no doubt that the above-market subsidies proposed in the NOPR will disrupt the price formation rules inherent in the design of PJM's current capacity markets. Those rules are designed to encourage offers at marginal costs and deter uneconomic generation from participation in these markets. The PJM Independent Market Monitor ("PJM IMM") pointed out in his testimony in the FirstEnergy and AEP state subsidy proceedings before the PUCO that allowing subsidized uneconomic generation to remain in PJM's markets will directly and adversely affect both the wholesale market clearing prices and the incentives for unsubsidized generators to invest in new generation in the region. The PJM IMM explained that the state subsidies proposed in the Ohio proceedings would encourage the subsidized generators to bid their resources into the PJM markets at zero, which "would have an anti-competitive, price suppressive effect on the PJM Capacity Market as would any offers at less than the competitive offer level." He explained that these price suppressive effects:

would make it difficult or impossible for generating units without subsidies to compete in the market. Competition depends on units making competitive offers that reflect their costs and the risk of paying penalties and/or receiving benefits (e.g. the offer cap for Capacity Performance resources) and on recovering revenues only from the markets and not from subsidies. Such subsidies would negatively affect the incentives to build new generation in Ohio

⁷² See Calpine Corporation et al. v. PJM Interconnection, LLC, Comments of the Independent Market Monitor for PJM (April 11 2016), Attachments B-1 and B-2, First Supplemental Testimony of Joseph E. Bowring on Behalf of the Independent Market Monitor for PJM in PUCO Case Nos. 14-1693-EL-RDR and 14-1297-EL-SSO (respectively) at 5 (December 28, 2015).

⁷³ Id.

and elsewhere in PJM and if adopted by others would likely result in a situation where only subsidized units would ever be built.⁷⁴

The PJM IMM also explained that market rules must "incorporate a consistent view of how the preferred market design is expected to work to provide competitive results in a sustainable market design over the long run."⁷⁵ He further stated that "[a] sustainable market design means a market design that results in appropriate incentives to retire units and to invest in new units over time such that reliability is ensured as a result of the functioning of the market."⁷⁶

As the PJM IMM explained to the PUCO, there are at least two broad paradigms that could ensure a proper outcome. The first contemplates competitive energy and capacity markets, "which together ensure that there are adequate revenues to incent new generation when it is needed and to incent retirement of units when appropriate."⁷⁷ He explained that this approach will result in long term reliability at the lowest possible cost. 78 The second contemplates a competitive energy market supported by cost-based capacity payments in which customers absorb the risks associated with investment in and ownership of generation assets through guaranteed payments under either guaranteed long term contracts or the cost of service approach.⁷⁹ The PJM IMM's testimony in the PUCO proceedings makes clear that allowing subsidized resources to participate in a competitive market (as contemplated in the NOPR), whether state or federally sourced, will distort the financial incentives to enter or to exit the market, and will distort market prices. This will unnecessarily increase costs for Ohio consumers in the long run.

⁷⁴ *Id*.

⁷⁵ *Id*.

⁷⁶ *Id*.

⁷⁷ *Id*.

⁷⁸ *Id*.

⁷⁹ *Id* at 5-6.

The PJM IMM submitted comments in the Technical Conference proceedings held in May 2017 in Docket No. AD17-11-000 regarding the effect of state policies on organized wholesale electricity markets. This testimony expounds on the adverse effects subsidies have on competitive markets and market clearing prices. In his statement submitted in that docket, the PJM IMM testified that:

The provision of subsidies to favored technologies, whether solar, wind, coal, batteries, demand side or nuclear, is tempting for those who would benefit, but subsidies are a form of integrated resource planning that is not consistent with markets. Proposals for fuel diversity are generally proposals to subsidize an existing, uneconomic technology.⁸⁰

He added that these types of subsidies are inconsistent with the PJM market design, inconsistent with the competitive market paradigm, and constitute a threat to both. He cautioned that the competitive market paradigm and a hybrid paradigm that would provide for cost-of-service based recoveries for certain subsidized resources are mutually-exclusive designs, and that once the competitive market paradigm is fundamentally altered, "it will be virtually impossible to return to markets." As the PJM IMM explained, subsidies are contagious and once introduced, competition in the markets could be replaced by competition for subsidies. Simply propping up uneconomic resources through subsidies will disrupt the sound economic incentives built into PJM's current wholesale market designs.

FERC itself has recognized the danger that subsidized resource participation in competitive markets can pose in its 2011 order eliminating certain exemptions from PJM's then-

26

⁸⁰ State Policies in Wholesale Markets Operated by ISO New England, New York Independent System Operator, Inc., and PJM Interconnection, LLC, Docket No. AD17-11-000, Statement of Joseph E. Bowring, Independent Market Monitor for PJM Interconnection, LLC at 2 (May 1-2, 2017).

⁸¹ Id.

⁸² *Id.* at 3.

⁸³ *Id*.

existing Minimum Offer Price Rule for new resources bid into PJM's capacity markets, ⁸⁴ and in its rulings regarding subsidized resources in the New York ISO. ⁸⁵ In the New York ISO proceeding, FERC rejected a complaint filed by independent power producers alleging that *de minimis* offers from existing capacity resources that would have exited the market but for the determination that those resources are needed to address local reliability issues can artificially suppress capacity prices in the New York ISO capacity auctions. FERC found that the above-market contracts "raise potential issues of artificial price suppression," and sent back to stakeholders the question of whether new market power mitigation rules for the rest-of-state region should be adopted. ⁸⁶ The proposed NOPR will not result in just and reasonable rates for Ohio consumers because of the price distortions and distorted financial incentives it will create in PJM's wholesale markets.

- V. THE NOPR WILL ADVERSELY AFFECT CONSUMERS BY INCREASING RATES AND SUBJECTING THEM TO ALWAYS PAYING THE HIGHER OF MARKET-BASED OR COST-BASED RATES.
 - A. The NOPR Will Increase Rates for Consumers by Requiring Them to Pay More Than the Market Otherwise Provides to Retain Old, Uneconomic Generation Resources (FERC Staff Ouestion 4 under Other).

The total amount of capacity to be subsidized just in PJM is unknown at this time. However, evidence in the AEP and FirstEnergy subsidy proceedings before the PUCO demonstrate that significant effect on Ohio consumers, and consumers throughout PJM, for any subsidies allowed for coal and nuclear resources. OCC's estimates presented in testimony submitted in those state proceedings indicate that subsidizing just the 6,000 MW of coal and nuclear capacity at issue in those cases would cost Ohio consumers more than \$5.5 billion over

_

⁸⁴ *PJM Interconnection, LLC*, 135 FERC ¶ 61,022 (2011) (accepting PJM's proposal to implement a MOPR for new resources); *orders on rehearing*, 137 FERC ¶ 61,145 (2011) and 138 FERC ¶ 61,194 (20121).

⁸⁵ Independent Power Producers of New York, Inc., v. New York Independent System Operator, Inc., 150 FERC ¶ 61,214 (2015).

⁸⁶ *Id.* at P 71.

an eight-year period.⁸⁷ If FERC adopts the proposed rule in NOPR, the total cost to consumers in PJM could well run into the tens of billions of dollars. The benefits, if any, received by Ohio consumers from subsidizing these old uneconomic resources in the markets will not offset the huge price tag for these subsidies; rather the subsidies are likely to reduce reliability and resilience given the poorer forced outage rates experienced by older resources facing economic retirement.⁸⁸

More importantly, the subsidies will deter investment in natural gas fired plants that is starting to take hold in Ohio. There are currently 9,937 MW of new natural gas-fired generation in Ohio either under construction or in the PJM generation interconnection queue.⁸⁹

B. If FERC Adopts the NOPR, It Should Eliminate Incentives for Arbitrage By Restricting Movement Between Market and Cost Based Rates (FERC Staff Question 5 under Implementation).

The proposed rule, if adopted, will create financial incentives for eligible resources to seek to pocket the upside benefit of market-based rates for shareholders when the resources can clear in the wholesale markets, and then avoid the downside risk of the markets when clearing prices fall. Owners of coal and nuclear resources did not complain about the infra-marginal revenues they earned during the 2000s and earlier in this decade when their resources were clearing the PJM markets. Indeed, some electric utilities that operated in non-retail choice states

-

In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider, PUCO Case No. 14-1693-EL-RDR, et al., ("AEP Ohio Amended Application") Supplemental Direct Testimony of James F. Wilson at 10-11 (December 28, 2015) (estimating a cost to Ohio consumers over \$1.9 billion to subsidize the uneconomic AEP coal resources), available at http://dis.puc.state.oh.us/ViewImage.aspx?CMID=A1001001A15L28B72148G02372;_see also In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan, Case No. 14-1297-EL-SSO, Second Supplemental Direct Testimony of James F. Wilson at 12-13 (December 30, 2015) ((estimating a cost to Ohio consumers over \$5.1 billion to subsidize the uneconomic FirstEnergy coal resources if those resources do not clear the PJM markets), available at http://dis.puc.state.oh.us/ViewImage.aspx?CMID=A1001001A15L30B45750G02894.

⁸⁸ See Section III.B of these Comments supra.

⁸⁹ New Power Plant Investments in Ohio, available at http://www.occ.ohio.gov/electric/subsidy-scorecard.pdf..

sought to transfer their state rate-based coal assets to unregulated marketing affiliates in order that shareholders could receive the benefits of these infra-marginal revenues. Monongahela Power Company's request in 2012 to transfer its old Pleasants Plant to its affiliate, Allegheny Energy Supply, is one such example. Recently, Monongahela Power has requested approval to reacquire the plant, thus transferring the financial risk of this now uneconomic resource back into captive retail consumer rates. It seems apparent that the strategy of these utilities is to privatize profits and socialize losses, all at captive customers' expense.

FERC's stated objective in facilitating the development of competitive wholesale markets was to achieve the benefits of competition for consumers by shifting the risk of owning and maintaining generating resources to the owners of those resources. FERC stated that "[n]ational policy has been, and continues to be, to foster competition in wholesale electric power markets," and that "[e]ffective wholesale competition protects consumers by providing more supply options, encouraging new entry and innovation, spurring deployment of new technologies, promoting demand response and energy efficiency, improving operating performance, exerting downward pressure on costs, and *shifting risk away from consumers*." But, adoption of the above-market subsidy rule proposed in the NOPR will allow the owners of these resources to arbitrage between market and cost-based rates, and will require Ohioans to always pay the higher of market or cost-based rates, whichever proves most beneficial to the utility. This "heads I win, tails you lose" approach to wholesale electricity prices does not satisfy FERC's primary obligation to ensure that wholesale electricity rates are just, reasonable and not

⁹⁰ FirstEnergy Service Company, Allegheny Energy Supply Company, LLC and Monongahela Power Company, 143 FERC ¶61,062 (2013) ("FirstEnergy Service Company").

Monongahela Power Company and Allegheny Energy Supply, LLC, Docket No. EC17-88-000 (ruling pending).

⁹² Order No. 719 at P.

⁹³ *Id*.

unduly discriminatory or preferential,⁹⁴ and to provide consumers a "complete, permanent, and effective bond of protection from excessive rates and charges."⁹⁵

C. FERC Should Direct PJM to Ensure that Total Revenues Earned by Subsidized Resources Do Not Exceed the Resources' Annual Cost-of-Service Based Revenue Requirements Each Year (FERC Staff Question 2 under Rates).

If FERC nonetheless adopts the NOPR proposal (which OCC does not recommend) it should require in any final rule that total annual revenues paid by customers in any year to subsidized resources do not exceed the annual revenue requirements determined on a cost basis for those resources. This objective would require establishing the cost of providing service from each resource to be subsidized though either annual production cost rate cases or through the adoption of a formula production rate that would establish an annual revenue requirement for the resource based on transparent records of actual costs (such as those reflected for production facilities in the FERC Form 1). Many wholesale purchase power agreements include a formula rate approach to determining the price to be paid for the generation services. Those production formula rates establish a formula for determining an annual revenue requirement for the generating resource based on the actual costs incurred by the resource in each year. The objective would be to determine the amount of the subsidy needed for each resource by subtracting from the annual revenue requirement each year the amounts earned by those resources in PJM's energy and ancillary services markets, capacity markets and shortage pricing mechanism. PJM's current RPM market rules implement a similar concept for purposes of determining net CONE, a parameter used to determine capacity prices in RPM, by imposing an

.

^{94 16} U.S.C. § 824d.

⁹⁵ Atl. Ref. Co. v. Pub. Serv. Comm'n, 360 U.S. 378, 388 (1959) (the FERC has an obligation to provide consumers a "complete, permanent, and effective bond of protection from excessive rates and charges.")

Energy and Ancillary Services and scarcity pricing revenue offset. ⁹⁶ This offset reflects the fact that capacity resources earn other revenues in PJM's markets. If FERC adopts the NOPR proposal for annual subsidies for uneconomic resources in the PJM markets, it should similarly protect consumers against paying more than the resources' annual revenue requirements. It can do so by first determining those requirements through an annual production cost rate proceeding or a cost-based formula production rate, and then subtracting other revenues earned in the market. To the extent consumers must subsidize these generation units, the annual subsidies should not be producing revenues in excess of the resources' actual annual cost to provide service.

The NOPR does not address how the coal and nuclear resources already receiving state subsidies will be compensated under the proposed rule. For example, nuclear resources in Illinois are receiving state subsidies in the form of the Zero Emission Credit ("ZEC") program adopted in that state. In recent months, the Ohio legislature also has been considering similar legislation to address both nuclear and coal plants located in Ohio and surrounding states. These two bills could cost Ohio customers over \$350 million per year. Additionally, as noted above, the PUCO recently approved subsidies for AEP and Dayton Power and Light for their interests in two coal plants owned by the Ohio Valley Electric Corporation. AEP will collect over \$40 million in 2017 alone for its subsidy.

⁹⁶ See PJM Open Access Transmission Tariff, Attachment DD, Section 5.10(a)(ii)(C); see also PJM Interconnection, LLC, 126 FERC 61,275 at P 44 (2009) (accepting PJM's proposal to include scarcity revenues in the E&AS revenue offset).

⁹⁷ Village of Old Mill Creek v. Star, No. 17-CV-1163 (N.D. Ill. July 14, 2017).

⁹⁸ Ohio House Bill 178 (nuclear subsidy) Fiscal Analysis: https://www.legislature.ohio.gov/download?key=6977&format=pdf and Ohio House Bill 239 (coal plant subsidy) Fiscal Analysis: https://www.legislature.ohio.gov/download?key=7689&format=pdf

⁹⁹ In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter Into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider, PUCO Case No. 14-1693-EL-RDR, Second Entry on Rehearing at 27.

Power & Light Company¹⁰⁰ and approved a placeholder for power plant subsidies for Duke Energy Ohio.¹⁰¹ It is not clear whether these already or soon to be state-subsidized resources will receive additional subsidies under the NOPR proposed. If FERC adopts the NOPR, it should direct PJM to develop a compliance filing that nets the state and federal subsidy payments from total costs imposed on Ohio consumers. This will help to ensure that these generation resources do not over-recover costs and that Ohio consumers are not double charged to maintain these less reliable, uneconomic resources in the PJM wholesale markets.

D. FERC Should Direct that Any Subsidized Generation Costs Resulting from the NOPR be Spread Across the Entire PJM Region (FERC Staff Question 3 under Rates).

FERC has long held that costs should be allocated on either a cost causation or beneficiary pays basis. ¹⁰² The purported objective of the NOPR is to subsidize old uneconomic coal and nuclear plants in order to benefit the reliability and resilience of the regional grid. The NOPR sets forth no nexus between the proposed subsidies and any particular zone or sub-zone within PJM. Because there is no evidence that any particular zone or sub-zone within PJM has caused the need for subsidies, allocating the cost of these subsidies across the entire PJM region would ensure that those who will purportedly benefit from grid reliability and resilience, *i.e.*, all consumers in the region, will contribute to the cost of those subsidies. That is, FERC should adopt a "beneficiary-pays" approach to cost collection from customers for this purported enhanced reliability.

1

¹⁰⁰ In the Matter of the Application of the Dayton Power & Light Company To Establish a Standard Service Offer in the Form of an Electric Security Plan, PUCO Case No. 16-395-EL-SSO, Opinion and Order at 34-35.

¹⁰¹ In the Matter of Application of Duke Energy Ohio, Inc., for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan, Accounting Modifications and Tariffs for Generation Service, Case No. 14-841-EL-SSO, Opinion and Order at 47 (April 2, 2015), available at http://dis.puc.state.oh.us/TiffToPDf/A1001001A15D02B40703H86216.pdf.

¹⁰² *Illinois Commerce FERC v. FERC*, 576 F.3d 470 ((7th Cir. 2009) (affirming the beneficiary pays approach to allocating costs, finding that the benefits must be "at least roughly commensurate with" the allocated costs); see also KN Energy Inc., v. FERC, 968 F.2d 1295, 3000 (D.C. Cir. 1992) (finding that the FERC has traditionally required that "all approved rates reflect to some degree the costs actually caused by the customer who must pay them").

VI. IF FERC PURSUES A FINAL RULE, IT SHOULD REQUIRE MARKET SOLUTIONS TARGETED AT MINIMIZING ADVERSE EFFECTS ON CONSUMERS AND MARKETS.

A. FERC Should Require RTOs and ISOs to Develop Market Solutions that Minimize the Cost to Consumers (FERC Staff Question 3 under Other).

Market solutions rather than direct above-market subsidies would better minimize the cost of any revenues required to address reliability and resilience concerns. One mechanism that could accomplish the NOPR's objectives and mitigate adverse effects on the wholesale markets might be to require PJM to first determine the amount of capacity needed from eligible resources to provide a pre-determined level of reliability and resilience. Thus a baseline for procurement of subsidized resources would be set. The goal of any such mechanism should be to minimize the cost of any subsidies that customers will pay. If consumers must subsidize retention of these generation resources in the market, then the quantity of capacity to be subsidized should be limited to the minimum deemed necessary to ensure reliability and resilience.

FERC also should consider imposing a cap on the quantity of subsidized resources to be acquired in the wholesale markets. In the PJM region, that cap could be determined based on PJM's Fuel Diversity report issued in March 2017. That report indicates that PJM's markets can operate reliably with up to 86% natural gas-fired resources in the portfolio of resources in the region. However, as PJM notes, that study did not fully capture the effects of extreme weather conditions such as those present during the 2014 Polar Vortex. To account for such factors, a cap of 28%, *i.e.*, double the amount of non-gas-fired capacity needed to maintain reliable services in PJM, should be considered. Such a cap would ensure that Ohio consumers pay no

¹⁰³ PJM Fuel Diversity Report at 5.

 $^{^{104}}$ Id

more than the bare minimum subsidy needed to maintain uneconomic coal and nuclear resources to satisfy reliability and resilience needs.

B. FERC Should Limit Eligibility to Existing Resources Capable of Providing Essential Energy and Ancillary Services (FERC Staff Questions 1, 2 and 5 under General Eligibility; FERC Staff Questions 2 and 3 under Fuel Supply Requirement).

FERC should limit eligibility for subsidies under the proposed rule to existing resources in order to avoid encouraging additional investment in new uneconomic resources. Thus, repowered and new coal and nuclear resources should not be eligible for the subsidies proposed in the NOPR. Additionally, resources eligible for subsidies under the proposed rule should be those capable of providing the needed reliability and resilience services. If consumers must pay subsidies to retain old, uneconomic coal and nuclear resources, those plants should at least be capable of providing the services for which they are being paid. FERC also should limit eligibility for the subsidies to only those resources that PJM determines need the subsidies to avoid retirement. Otherwise, Ohio consumers will be forced to pay billions more to retain capacity that would have stayed in the wholesale markets anyway.

The NOPR proposes that eligible resources be capable of providing essential services. However, there is little consensus as to what is meant by "essential reliability services." PJM in its Fuel Diversity Report provided a list of attributes that it believes support needed reliability and resilience. That list includes frequency response, voltage control, ramping, fuel assurance, flexibility, black start, environmental restrictions and equivalent availability factor. However, PJM notes that not all resources, *e.g.*, less flexible coal resources, are capable of providing all of these resilience attributes. PJM also notes future capability may change due to changes in

¹⁰⁵ PJM Fuel Diversity Report at 3.

¹⁰⁶ *Id*

¹⁰⁷ *Id.* at 5-6.

technology. Hence the determination of which attributes should be compensated, and how to compensate for those attributes is complicated. PJM just this summer initiated a stakeholder process to better define resilience and possible compensation mechanisms. Rather than truncate these on-going stakeholder efforts by adopting the NOPR as a final rule, FERC should direct PJM and other RTOs and ISOs to continue to study resilience questions in collaboration with their stakeholders, and report on those efforts within some reasonable period, such as six months to a year.

C. FERC Should Require PJM to Implement Separate Clearing Mechanisms for Unsubsidized and Subsidized Capacity (FERC Staff Question 2 under Implementation).

If FERC decides to accept the NOPR as a final rule, which OCC is not recommending, it should consider requiring for the PJM region a market solution that would acquire unsubsidized and subsidized capacity through separate auctions, with unsubsidized resources being acquired first. Subject to the cap recommended earlier, the auction for subsidized capacity should clear subsidized generation resources on a least-cost basis. This approach would mitigate any adverse effects of the NOPR on PJM wholesale market outcomes by minimizing the effect of subsidized resources on clearing prices for unsubsidized resources. It would also minimize the distortion in clearing prices sure to result from allowing uneconomic generation resources to remain in the market. And it would minimize the cost of the subsidies for Ohio consumers.

D. RTOs and ISOs Should Develop Performance Standards for Subsidized Resources and Penalize Non-Performance (FERC Staff Question 4 under Implementation).

In approving PJM's Capacity Performance proposal in 2015, FERC recognized the importance of making sure that if consumers must pay more for capacity to ensure performance,

_

¹⁰⁸ *Id*.

¹⁰⁹ *Id.* at 6.

performance standards and non-performance penalties must be a critical element of the market rules. 110 Any rules implementing the NOPR proposal, if adopted, likewise must ensure that Ohio consumers receive the reliability and resilience benefits paid for through the subsidies. Thus, if FERC adopts the NOPR, it should require compliance filings by PJM that include strict performance standards and non-performance penalties for the subsidized resources to ensure that the reliability and resiliency benefits paid for are received by consumers. As then Chairman Norman Bay recognized in his dissent to FERC's order approving PJM's Capacity Performance proposal:

A rational profit-maximizing resource could simply seek a capacity award in the auction, fail to perform during each performance assessment hour, and likely pay a penalty less than the carrot it has received. To put it more bluntly, the resource could be paid for doing nothing during the emergency hours of the year when it is most needed and for which it has been well compensated.¹¹¹

Strong performance obligations and non-performance penalties should be required if the FERC implements the NOPR subsidy proposal to avoid creating the negative financial incentives so cogently identified by Chairman Bay. Non-performance penalties must be shareholder funded to avoid charging captive customers twice: once via a subsidy, then a second time through a penalty.

VII. THE NOPR PROVIDES AN UNREASONABLY SHORT AND INADEQUATE TIME FOR IMPLEMENTATION AND COMMENT.

A. RTOs and ISOs Will Need Much More Than 15 Days to Design the Significant Market Rule Changes that Will Be Needed To Implement the NOPR (FERC Staff Question 1 under Other).

The design of PJM's current capacity market is extremely complicated, reflecting numerous administratively-determined elements that were developed over a period of ten years

¹¹⁰ Capacity Performance Order at PP 91-94, 158.

¹¹¹ Capacity Performance Order, Chairman Bay's Dissent at 4.

or longer. PJM has consistently modified those rules in an effort to address new challenges posed by the changing operational, technological and financial conditions in which the market operates. PJM first implemented RPM in 2006, and sought major modifications in 2009 (revisions to RPM rules concerning, *inter alia*, auction parameters, participation by demand response, market power mitigation, the energy and ancillary services revenue offset, must offer requirements, and non-performance penalties), 2011 (Minimum Offer Price Rule), 2013 (exceptions to the Minimum Offer Price Rule), 2015 (Capacity Performance) and 2017 (External Capacity Obligations filing in Docket No. ER17-1138-000). The financial incentives built into PJM's capacity market rules are intricately intertwined with the design of PJM's energy markets, and thus a careful, well-thought-out approach to market design is imperative to deter arbitrage, manipulation, and gaming of these markets.

While the NOPR is short and simple in its approach, requiring that RTOs and ISOs submit compliance filings to implement the proposed rule is not. There will be complicated market design changes that will be required to implement the proposed rule,, especially considering that the end result is likely to be a hybrid approach to setting electricity rates. Implementation will take thoughtful, and painstakingly detailed consideration, and careful vetting with stakeholders to ensure that the potential for unintended consequences, such as the exercise of market power, market manipulation and gaming, are eliminated or mitigated. PJM's efforts in pursuing major revisions to the RPM capacity market design, *e.g.*, PJM's Capacity Performance rules, have often taken a year or longer to formulate. If FERC adopts the NOPR as a final rule, it should allow at least a one-year period for compliance filings. The 15-day period contemplated by the NOPR is simply inadequate to ensure that the radical changes that will be needed to PJM's existing competitive market paradigm for acquiring and pricing capacity can be

implemented in a manner that minimizes the adverse effects of the rule on wholesale markets and consumers in the PJM region.

B. The NOPR Provides Insufficient Time for Meaningful Comments on the Proposed Rule.

The 40-day initial and reply comment period established by FERC is extremely short compared with other significant market design rule changes FERC has pursued. For example, in recent years FERC has allowed comment periods of 90 days or longer for the significant changes contemplated in Order Nos. 719 (demand response and market power mitigation requirements), 888 (open access transmission requirements), 890 (transmission planning and additional open access transmission requirements), 1000 (regional and inter-regional transmission planning and cost allocation requirements) and 2000. In each of these dockets, FERC has taken six month to a year from initiation of the NOPR to adoption of a final rule. Neither FERC nor DOE has set forth any justification for the unreasonably truncated process being implemented in this NOPR.

Although the industry is responding within the 40-day period allowed for comments under the NOPR, the sheer number of industry trade associations filing or supporting motions for an extension of time demonstrates the discomfort within the industry of moving forward with the major market design changes proposed in the NOPR on such short notice. Instead of trying to implement the NOPR at this time, FERC should adopt the recommendations in the August 2017 DOE Staff Report that FERC proceed with further study of "mechanisms for enabling equitable,"

1

¹¹² Extension requests were filed by the National Association of State Utility Consumer Advocates, the National Association of Regulatory Utility Commissioners, the Advanced Energy Economy, American Council on Renewable Energy, American Petroleum Institute, American Wind Energy Association, American Public Power Association, Electric Power Supply Association, Electricity Consumers Resource Council, Interstate Natural Gas Association of America, National Rural Electric Cooperative Association, Natural Gas Supply Association, the Solar Energy Industries Association, the Industrial Coalition, the Organization of MISO States, the Independent Petroleum Association of American, the American Forest & Paper Association, the Northwest and Intermittent Power Producers Coalition, the Process Gas Consumer Group and the Public Interest Organizations. Together, these trade associations represent a broad spectrum of industry stakeholders that includes power suppliers, consumers, municipal and rural electric cooperative utilities, residential and industrial consumer interests and more.

value-based remuneration for desired grid attributes – such as ERS [Essential Reliability Services], fuel availability, high resilience, low emissions, flexibility etc. – with alternative market and non-market structures."

VIII. CONCLUSION AND RECOMMENDATIONS

The NOPR proposal for customers to subsidize uneconomic coal and nuclear resources in organized wholesale markets is a bad idea. It is neither based on sound evidence demonstrating an immediate need for the subsidies, nor a well thought-out approach to setting prices for electricity in organized wholesale markets. The proposed rules will unnecessarily harm consumers through additional unwarranted above-market charges for less reliable, old uneconomic generation. Implementation of such subsidies would unreasonably impose higher costs on Ohio customers while lowering the reliability and resilience of the PJM regional grid. The NOPR represents a fundamental and unwarranted departure from FERC's long-held approach of facilitating the development of competitive wholesale markets for setting wholesale electricity prices. If FERC believes that resilience concerns continue to exist in the PJM region in the wake of implementation of PJM's Capacity Performance rules, it should instead defer to existing stakeholder efforts in PJM to further study those concerns and develop market solutions to resolving those concerns.

-

¹¹³ DOE Staff Report at 128.

WHEREFORE, for the foregoing reasons, the Office of the Ohio Consumers' Counsel

requests that FERC protect consumers from bearing more unnecessary costs to subsidize

uneconomic power plants. FERC should decline to move forward with the NOPR proposed by

the Department of Energy in this docket. If necessary, FERC should direct the RTOs and ISOs

to conduct further studies of whether additional compensation may be needed to ensure the

reliability and resilience of the grid.

Respectfully submitted,

BRUCE J. WESTON CONSUMERS' COUNSEL

/s/ Kevin F. Moore

Kevin F. Moore

Assistant Consumers' Counsel **Assistant Consumers Counsel**

Office of the Ohio Consumers' Counsel

10 West Broad Street, Suite 1800

Columbus, Ohio 43215-3485

(614) 387-2965

Kevin.moore@occ.ohio.gov

DATED: October 23, 2017

40