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Via Electronic Mail and U.S. Mail

Hon. Rick Perry
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington D.C. 20585
The.Secretary@hq.doe.gov

Catherine Jereza
Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington D.C. 20585
Catherine.Jereza@hq.doe.gov

Dear Mr. Perry and Ms. Jereza:

FirstEnergy Solutions Corp. (“FirstEnergy” or “FES”) has submitted a request for an emergency order, pursuant to, *inter alia*, section 202(c) of the Federal Power Act. As envisioned by FirstEnergy, such order would result in utility customers paying above-market cost-of-service rates (including a guaranteed profit) for at least four years to the owners of all merchant coal and nuclear generating units in PJM that have at least 25 days’ worth of onsite fuel. According to FirstEnergy, such payments are necessary to prop up those merchant coal and nuclear plants in order to ensure “resiliency” in the PJM system and avoid an “emergency” triggering the extraordinary powers of section 202(c). In reality, however, FirstEnergy has not shown that resiliency is at risk, or that the aging coal and nuclear units that may be retiring over the next seven years are needed to ensure such resiliency. Nor has FirstEnergy proposed a remedy that could be legally authorized under the Federal Power Act.

FirstEnergy’s request here is nothing more than a slightly scaled down version of the Grid Resiliency Pricing proposal that the Federal Energy Regulatory

Commission (“FERC”) unanimously rejected less than three months ago. FirstEnergy has not and could not provide any basis for a different result to be reached here. As such, the Department can reject FirstEnergy’s legally flawed and factually unsupported request out of hand.

If the Department does not reject FirstEnergy’s request as not approvable on its face, we urge you to open up a formal docket, or undertake some other public proceedings to solicit public comments, so that the Department can reach a considered decision in this matter.¹ As set forth below, FirstEnergy’s application raises substantial legal and policy issues, will impose staggering costs on PJM ratepayers, and undermine competition and investor certainty in the PJM marketplace.

I. Procedure and Standing

In this letter, Sierra Club sets out its initial comments in response to FirstEnergy’s request. Should the Department not reject FirstEnergy’s request outright, we expect that it will open a docketed proceeding to address the request, as it did in response to the request from PJM Interconnection last year regarding the Yorktown units.² Sierra Club intends to fully participate in that proceeding through the submission of evidence and legal argument, and to seek rehearing should the Department issue an order outside the scope of its authority.

Sierra Club feels compelled to offer these initial comments only the day after FirstEnergy’s request was filed because, as FirstEnergy directly acknowledges in the request, it “likely will file for bankruptcy by the end of March 2018.”³ A bankruptcy filing may affect the rights of entities such as the Sierra Club to fully protect their interests in this matter.

Sierra Club has a substantial interest in this matter and would be adversely affected in numerous ways by an order along the lines of what FES proposes. FES’ proposed order would require PJM to negotiate contracts with dozens of coal and nuclear-power generation units across PJM’s territory, to provide those generation owners with recovery of all their costs, including a rate of return. These additional

¹ The Department has taken the position that its orders, under section 202(c), are “proceedings” within the meaning of section 313 of the Federal Power Act, 16 U.S.C. § 8251. That interpretation of the Act emphasizes the appropriateness of engaging in the procedural steps by which the Department conducts its other proceedings—most importantly, notice and an opportunity for interested parties to comment.

² DOE, Federal Power Act Section 202(c) – PJM Interconnection & Dominion Energy Virginia, 2017, at <https://www.energy.gov/oe/downloads/federal-power-act-section-202c-pjm-interconnection-dominion-energy-virginia-2017-0>.

³ FirstEnergy’s March 29, 2018 request to the Department at 8, 20.

costs would be passed on to PJM's ratepayers. The relief that FES seeks for all merchant units in PJM is extremely similar to that called for in the Grid Resiliency Pricing Rule last fall.⁴ That rule was projected to have costs of up to \$8.1 billion annually for PJM ratepayers.⁵

As of late 2016, Sierra Club had over 112,000 members who reside in the service territory of PJM and pay electricity bills to load-serving entities that buy power from PJM. These members would see higher electricity bills as a result of FirstEnergy's requested order. These financial harms to our members are germane to Sierra Club's mission, which includes addressing the quality of the human environment by promoting an affordable transition to clean energy. Sierra Club also has offices in PJM territory and is itself a ratepayer affected by any cost increases put in place as a result of an order responsive to FES' request.

In addition, Sierra Club members are affected by the pollution that will be produced by continued operations of coal-fired power plants that would otherwise retire in the near future. As described below, most of the retirements vaguely alluded to by FES are several years away. However, several units have already been cleared for retirement, such as FirstEnergy's Pleasants Power Station, which PJM has determined can close on January 1, 2019 without any adverse impacts on reliability.⁶ Sierra Club has members who are negatively affected by air and water pollution from Pleasants that would otherwise cease upon its deactivation, but would persist if the plant received additional compensation as envisioned in FES' request.

The Sierra Club has a demonstrated organizational commitment to the above-described interests. The Sierra Club's Beyond Coal Campaign seeks to reduce the pollution currently being produced by coal-fired power plants such as those that FES seeks to support. To that end, Sierra Club has participated in regulatory proceedings relating to all of the units listed in Attachment A to FES' request,

⁴ DOE, Notice of Proposed Rulemaking: Grid Resiliency Pricing Rule, available at <https://www.energy.gov/sites/prod/files/2017/09/f37/Notice%20of%20Proposed%20Rulemaking%20.pdf>.

⁵ See Robbie Orvis et al., The Department of Energy's Grid Resilience Pricing Proposal: A Cost Analysis (Oct. 2017), available at http://energyinnovation.org/wp-content/uploads/2017/12/20171025_Resilience-NOPR-Cost-Research-Note-UPDATED.pdf (Table 2: Annual Increase in Customer Costs by Region, Reading 4, Total).

⁶ Robert Walton, PJM greenlights FirstEnergy to deactivate coal plant units at Pleasants Power Station, UtilityDive (Mar. 22, 2018), at <https://www.utilitydive.com/news/pjm-greenlights-firstenergy-to-deactivate-coal-plant-units-at-pleasants-pow/519791/>.

seeking to mitigate their pollution, minimize costs that ratepayers must bear to support these plants, or both.

II. FirstEnergy’s Application Does Not Describe Any Emergency Within the Meaning of Section 202(c) of the Federal Power Act.

1. Section 202(c) Confines Emergencies to Specific, Imminent Events.

Section 202(c) of the Federal Power Act provides the Department with authority over “the generation of electric energy” only “[d]uring the continuance of any war in which the United States is engaged,” or if “the [Department] determines that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes.” 16 U.S.C. § 824a(c)(1). The statute’s use of the present text—that an emergency “exists”—demands, at a minimum, that an emergency be present, certain, and immediate, rather than distant and contingent.

That certainty and immediacy is inherent in the statute’s fundamental requirement—an “emergency.” The Act does not define “emergency”; according to the dictionary, the word primarily demands “an unforeseen combination of circumstances or the resulting state that calls for *immediate* action.” Merriam Webster’s Dictionary 407 (11th ed. 2009) (emphasis added). An emergency, by definition, is not an anticipated event occurring, perhaps, years in the future; it describes an imminent, unavoidable threat.

The surrounding context emphasizes the exigency of the circumstances described by section 202(c)’s reference to an “emergency”: the authority granted by section 202(c) is, primarily, a war-time power. 16 U.S.C. § 824a(c) (authorizing orders during “continuance of any war in which the United States is engaged”). See *Jarecki v. G.D. Searle & Co.*, 367 U.S. 303, 307 (1961) (noting that statutory terms should be interpreted in context of nearby parallel terms “in order to avoid the giving of unintended breadth to the Acts of Congress”). An “emergency” under the statute is limited to circumstances that are similarly urgent: “a *sudden* increase in the demand for electric energy,” for example. 16 U.S.C. § 824a(c) (emphasis added). See *Richmond Power and Light v. Federal Energy Reg’y Comm.*, 574 F.2d 610, 615 (D.C. Cir. 1978) (holding that section 202(c) “speaks of ‘temporary’ emergencies, epitomized by wartime disturbances” and that statute is reasonably understood to exclude circumstances such as “dependence on imported oil”).

Section 202(c) is, moreover, expressly meant to address short-term, “temporary” conditions—it provides no authority to implement long-term policy preferences, in response to potential difficulties that may emerge years from now. *Id.* Congress underlined the limited scope of section 202(c) when enacting the provision. “This is

a temporary power designed to avoid a repetition of the conditions during the last war, when a serious power shortage arose. Drought and other natural emergencies have created similar crises in certain sections of the country; such conditions should find a federal agency ready to do all that can be done in order to prevent a breakdown in electric supply.” S. Rep. No. 74-621 at 49 (1935).⁷

The Department’s regulations confirm those limitations. They define an “emergency” as “an *unexpected* inadequate supply of electric energy” resulting from “the unexpected outage or breakdown of facilities,” which may result from “weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected ‘entity’ to prevent.” 10 C.F.R. § 205.370 (emphases added). Anticipated customer demand can be an emergency, only upon “a *sudden* increase” in such demand emphasis). Those examples reflect the limited nature of the emergencies encompassed by section 202(c): unusual, unforeseen, and unexpected events, with immediate and substantial consequences.

2. *The Structure of the Act Further Confirms That the Authority Conferred by Section 202(b) Is Limited to Unusual, Unexpected Circumstances.*

Other portions of the statute, outside section 202(c) itself, reinforce that section’s tightly limited scope. Section 202(b) confirms the constrained nature of the Department’s emergency powers under section 202(c). That section provides cabined authority (exercised by the Federal Energy Regulatory Commission, rather than the Department) to “direct a public utility ... to establish physical connection[,] ... sell energy, or exchange energy” with other persons, under normal, non-emergency conditions. 16 U.S.C. § 824a(b). The statute establishes specific standards and procedural requirements for such non-emergency orders. *Id.* Section 202(c) removes many of those requirements—but does so only during war-time or similarly extreme circumstances. 16 U.S.C. § 824a(c). *See Otter Tail Power Co. v. Fed. Power Comm.*, 429 F.2d 232, 233-34 (1970) (holding that section 202(c) “enables the Commission to react to a war or national disaster,” while section 202(b) “applies to a crisis which is likely to develop in the foreseeable future”). That structure establishes a clear divide between quotidian energy-system management (even where necessary to avert a future crisis), governed by section 202(b), and unusual, unforeseeable ‘emergencies,’ governed by section 202(c). Read within that structure, section 202(c) cannot apply to routine planning matters; such application would render section 202(b) unnecessary, and eviscerate its procedural and substantive requirements.

⁷ While Congress amended section 202(c) in 2015, it did not alter the Department’s basic grant of emergency authority; it only addressed occasions on which a Department order might produce a conflict with other laws. *See* H.R. Rep. No. 114-357 (2015).

Section 215 of the Federal Power Act, added in 2005, suggests additional boundaries on the Department’s powers under section 202(c). Section 215 provides a detailed enforcement mechanism, with specified procedures, remedies, and timeframes, for federal reliability standards. *See generally* 16 U.S.C. § 825o. As the D.C. Circuit has recognized, the portion of the Federal Power Act that predates that section—which includes section 202(c)—did not provide the federal government with the power to enforce requirements designed to ensure broad, long-term reliability requirements. *Alcoa, Inc. v. FERC*, 564 F.3d 1342, 1344 (D.C. Cir. 2009) (noting that prior to the Energy Policy Act of 2005, “the reliability of the nation’s bulk-power system depended on participants’ voluntary compliance with industry standards”). Consequently, a bare violation of a federal reliability standard cannot suffice to provide the Department with “emergency” power to enforce that standard under section 202(c). Reading section 202(c) to permit direct enforcement of reliability requirements through emergency orders would bypass the limits and procedures that Congress enacted in section 215 to constrain such enforcement. *See California Independent System Operator Corp. v. FERC*, 372 F.3d 395, 401-2 (D.C. Cir. 2004) (“Congress’s specific and limited enumeration of [agency] power over [particular matter] in [one section of Federal Power Act] is strong evidence that [separate section] confers no such authority on [agency].”). Similarly, the Federal Power Act contains separate and independent provisions to address wholesale rates, and any perceived insufficiency of such compensation. 16 U.S.C. § 824d & 824e. Those provisions likewise indicate that any perceived inadequacy in the wholesale markets cannot be an emergency sufficient to provide the Department with authority under section 202(c).

3. *The Application Does Not Contain Information Sufficient to Support Any Finding that an Emergency Exists under Section 202(c).*
 - a. The Long-Term Resource-Allocation Concerns Described by FirstEnergy Are Not an “Emergency”.

FirstEnergy’s request describes no imminent, specific threat that could plausibly qualify as an “emergency” under the statute. The request asserts a need for “fuel diversity,” and other parties’ failure to pay FirstEnergy (and other merchant coal and nuclear generators) the “compensation” to which FirstEnergy believes itself to be entitled. Request 3. It cites no imminent shortfall in supply; it states only that certain units have dispatched in the past, and suggests that such units may be replaced by other sources of supply over the next seven years. *Id.* at 8-9. The Department has never exercised section 202(c) under similar circumstances; in every case, it has carefully established an imminent, unavoidable, and specific

short-fall in electricity supply, and issued narrowly tailored orders intended to address that specific shortfall.⁸

Even if those suggestions were adequately supported (and they are not, see Part III, below), they would not suffice to demonstrate an emergency under section 202(c). The Department has made clear that its authority, under section 202(c), may only be exercised to address “a *specific* inadequate power supply situation.” 10 C.F.R. § 205.371 (emphasis added). FirstEnergy’s application alleges no such specific situation; indeed, it acknowledges as much, in its failure to meaningfully address the application requirements specified in the Department’s regulations. Request 30-31. As the D.C. Circuit has noted, such “long-term” policy concerns, associated with “broad questions of resource allocation,” are not the proper subject of an emergency order under section 202(c). *Richmond Power & Light*, 574 F.3d at 615-16 (citation omitted).

b. The Entity Authorized to Address FirstEnergy’s Concerns Has Already Established That There Is No Need for Emergency, Near-Term Action.

The Federal Power Act (and other statutes) give the Federal Energy Regulatory Commission (and the National Electric Reliability Council) primary authority over the questions that FirstEnergy asks this Department to resolve by emergency order. *E.g.*, Request 7-8 & 27 (asserting that “wholesale pricing” is not providing “full[] compensa[tion]” to FirstEnergy and threat to long-term “reliability”), and 16 (claiming non-specific “reliability” concerns). *See* 16 U.S.C. §§ 824d & 824o. As noted above, that the Federal Power Act includes separate, closely cabined provisions addressing such matters strongly suggests that FirstEnergy’s stated concerns are not appropriately addressed through section 202(c). Rather, they are matters for FERC, and for NERC.

And FERC has already squarely addressed, and rejected, the primary rationale provided by FirstEnergy for an order. As FirstEnergy acknowledges, FERC very recently rejected a proposal by the Department to require certain grid operators, including PJM, to provide cost-based compensation to merchant coal and nuclear generators. *See* FERC, Grid Reliability and Resilience Pricing, Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018). FERC found that existing tariffs

⁸ FirstEnergy cites the Department’s recent orders regarding the Yorktown power plant. Request 19. But as the Department made clear in response to Sierra Club’s requests for rehearing, those Orders were only issued after the Department found that the orders were the sole means of avoiding “immediate interrupt[i]ons of service” to a substantial portion of Virginia, and were narrowly tailored to avoid those defined, established interruptions. Summary of Findings for Department of Energy Order No 202-17-4 at 6-7.

were not unjust and unreasonable, based on the evidence that no “past or planned generator retirements . . . [are] a threat to grid resilience. *Id.* at 15. FirstEnergy presents essentially the same evidence of a threat to resiliency that the Commission rejected just a few months ago. FirstEnergy did not even seek rehearing of the Commission’s January 8 order, but instead seeks to relitigate the issue in a forum it views as more favorable. The Department should not accept FirstEnergy’s invitation to reconsider an issue decided not even three months ago by a unanimous FERC.

Although FERC decided there was no urgent threat to the grid’s reliability to justify the extraordinary action proposed by the Department, it did initiate a docket to promptly and more comprehensively address whether additional steps are needed to ensure resilience. Jan. 8 Order at 17-20. While FirstEnergy asserts that FERC’s ongoing docket to examine the problem that FirstEnergy complains of is “too little, too late,” Request at 10, FERC’s ongoing proceeding is precisely the forum to address the kinds of longer-term issues that FirstEnergy alleges, such as a substantial portion of the generation fleet retiring over a number of years. Likewise, the energy and capacity market reforms that PJM is currently considering, and will shortly present to FERC, are the proper forum to address any shortcomings in market design.

4. *The Relief Requested by the Application Is Not “Just and Reasonable” Compensation Within the Meaning of Section 202(c).*

FirstEnergy asks the Department to require that it and other merchant coal and gas generators receive compensation for “operating expenses, costs of capital and debt, and a fair return on equity and investment,” and specifically prescribe “full cost recovery consistent with ratemaking standards and principles or (b) full recovery of all costs necessary to ensure continued operations.” Request 31-32. FirstEnergy asks that contracts setting out this cost recovery be negotiated within 15 days, a virtual impossibility given the enormous number of units for which FirstEnergy seeks compensation and the likelihood that none of these units, which have operated in competitive markets for years, are prepared to present cost-of-service data to PJM. Moreover, FirstEnergy asks the Department, “if PJM and the owners are unable to agree to the contractual terms” within 15 days, to itself “determine just and reasonable rates.” *Id.*

As an initial matter, the Department’s regulations specify that, should the affected parties be unable to reach an agreement as to rates, the Department “shall . . . refer the rate issues to the Federal Energy Regulatory Commission.” 10 C.F.R. § 205.376. The Department cannot, therefore, grant FirstEnergy’s request that it directly set “just and reasonable rates,” Request at 32. The determination of just and reasonable wholesale rates is a matter indisputably within FERC’s jurisdiction, not that of the Department.

More importantly, the Federal Power Act allows the Department only to implement “just and reasonable” terms. 16 U.S.C. § 824a(c)(1). And the “full recovery” of costs and a fair return on equity that FirstEnergy requests is (Request 31)—as FERC itself has suggested—not demonstrably just or reasonable. In its January 8, 2018 order in RM18-1-000, the Commission held that the proposed remedy to “allow all eligible resources to receive a cost-of-service rate regardless of need or cost to the system” had not been shown to be just and reasonable nor to avoid undue discrimination. *Id.* at 16. FirstEnergy’s proposed compensation here suffers from many of the same flaws in the proposal that FERC rejected, including but not limited to, the lack of any explanation of whether such compensation should be net of market revenues, lack of assurance that a unit is actually needed to serve load, and lack of cost controls imposed by the scrutiny of proper cost-based ratemaking.

III. PJM is reliable and will remain so for the foreseeable future.

As with the Proposed Grid Resiliency Rule, FirstEnergy’s request relies on unfounded claims that planned retirements of existing generating units threaten the “resiliency” of the PJM system. As Sierra Club and other Public Interest Organizations explained in their initial and reply comments on the Proposed Rule, and as FERC found in rejecting the Proposed Rule, there is no evidence that such generating unit retirements threaten the reliability or resiliency of the system.⁹ Instead, as PJM recently explained in response to questions from the U.S. Senate

PJM does not believe that operating outside of the market to preserve a particular class or type of generation is needed at this time for reliability. The markets have been resilient in attracting new investment. In addition, a variety of tools exist as a backstop should specific generation be needed in a particular area.¹⁰

Nothing in FirstEnergy’s request supports a different conclusion here.

Given that FirstEnergy’s thin support for its request closely resembles that presented to initiate FERC’s consideration of the Grid Resiliency Pricing Rule, Sierra Club refers the Department to the extensive record created in that case, in particular, the comments of Public Interest Organizations, cited above, and those of PJM Interconnection, which provide a detailed rebuttal of the arguments presented

⁹ January 8, 2018 FERC Order in Docket Nos. RM18-1-100 and AD18-7-000.

¹⁰ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

by FirstEnergy in its Request.¹¹ We write here to briefly address two of the more egregious arguments posited in FirstEnergy’s request—FirstEnergy’s claims that the 2014 Polar Vortex and the recent Bomb Cyclone somehow demonstrate the resiliency value of the aging coal and nuclear units in PJM.

1. The Polar Vortex does not justify FirstEnergy’s request for DOE to prop up uneconomic coal and nuclear units in PJM.

FirstEnergy’s continued misrepresentation of the events of the 2014 Polar Vortex is especially galling. Request 5, 9, 17. Indeed, while FirstEnergy claims that the Polar Vortex established the necessity of its coal and nuclear units, the Polar Vortex actually showed that on-site fuel storage does not ensure enhanced resiliency.

Of the 35,000 MW of generation capacity that failed to respond, nationwide, during the Polar Vortex, 26 percent was coal and 5 percent was nuclear. DOE Staff Report at 98. And while a significant amount of natural gas capacity also experienced outages, the majority of those outages related to frozen equipment, *not* fuel supply issues.¹² Within PJM, only a quarter of the record high 22% forced outage rate on January 7, 2014, was the result of fuel supply issues.¹³ Far more significant were other causes such as faulty plant maintenance and weather-related damage.¹⁴ PJM’s subsequent analysis of the Polar Vortex also highlighted that two resources not reliant on fuel—wind energy and demand—overperformed during that time period.¹⁵

¹¹ Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule.

¹² NERC Polar Vortex Review, at 2, 13 (2014), available at http://www.nerc.com/pa/rrm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29_Sept_2014_Final.pdf.

¹³ PJM, Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events at 25 (May 8, 2014), available at <http://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx> (hereinafter “PJM Jan. 2014 Cold Weather Events”).

¹⁴ *Id.*

¹⁵ *Id.* at 19-21 (May 8, 2014). FirstEnergy repeatedly states that 9300 MW of gas generation was unavailable during the Polar Vortex. Request 5, 17. This claim is based on the isolated fact during one hour of the Polar Vortex, 9,300 MW of generation was unavailable due to interruptions in the natural gas supply. PJM Jan. 2014 Cold Weather Events at 26. FirstEnergy fails to mention, however, that the amount of coal that experienced outages at that same time was 13,700 MW. *Id.*

FirstEnergy ignores the fact that, although fossil-fueled generators failed to perform at a significant rate during the Polar Vortex, PJM successfully managed the threat without having to resort to blackouts, and “even on the day with the tightest power supplies – January 7 – *several steps remained before electricity interruptions might have been necessary.*”¹⁶ This is in large part because PJM, like each RTO, provides for a planning reserve margin precisely to ensure reliability in the event that many supply resources are impacted at the same time, as occurred during the Polar Vortex.

And FirstEnergy also fails to acknowledge the significance of the reforms carried out after the Polar Vortex, which aimed to address the high generator outage rates during the event. In response to the Polar Vortex, FERC held a technical conference focused on the impacts of the Polar Vortex and actions to respond.¹⁷ In November 2014, FERC issued an order to initiate a review of how each RTO was addressing “fuel assurances,” a “broad concept” intending to encompass “a range of generator-specific and system-wide issues, including the overall ability of an RTO’s/ISO’s portfolio of resources to access sufficient fuel to meet system needs and maintain reliability.”¹⁸ Each affected RTO responded to this directive, and ultimately adopted a series of reforms intended to address winter performance concerns. For example, PJM implemented a series of common-sense nonmarket reforms to improve generators’ preparedness for winter conditions.¹⁹ In the very next winter, despite even higher peak winter loads, PJM saw much lower forced outage rates than during the Polar Vortex, and improved performance among generators that had participated in pre-winter operational testing—one of the reforms PJM put in place following the Polar Vortex.²⁰ In addition, both PJM and ISO-NE modified their capacity market rules so as to ensure supplier performance during scarcity conditions.²¹

¹⁶ PJM Jan. 2014 Cold Weather Events at 4.

¹⁷ Notice of Technical Conference, “Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators” AD14-8 (February 21, 2014).

¹⁸ Order on Technical Conferences, 149 FERC ¶ 61,145 (Nov. 20, 2014).

¹⁹ See Protest of Public Interest Organizations, FERC Docket No. ER15-623-000, at Appendix B (summarizing PJM’s extensive measures to improve generator preparedness).

²⁰ See PJM Interconnection, 2015 Winter Report (May 13, 2015), at <http://www.pjm.com/-/media/library/reports-notices/weather-related/20150513-2015-winter-report.ashx?la=en>, at 5-6.

²¹ See Order on Proposed Tariff Revisions, 151 FERC ¶ 61,2018 (2015); Order on Tariff Filing and Instituting Section 206 Proceeding, 147 FERC ¶ 61,172 (2014).

While FirstEnergy suggests that the Capacity Performance program somehow “failed” because it did not spur the development of new gas supply contracts,

Finally, FirstEnergy's Request would support a fleet of merchant coal units that, in fact, *performed quite poorly* during the Polar Vortex.²² Analysis by Synergy Energy Economics of hourly generation data reveals that, after initially ramping up to meet growing demand, the coal fleet's performance began to decline even before the peak hour on January 6, 2014.²³ By PJM's winter peak on the evening of the 7th, coal output had fallen by more than 2,500 MW relative to its peak from the prior day.²⁴ Even among units that remained online, most coal units provided less output at the season peak than they had the previous day.

2. *The recent Bomb Cyclone weather event and resulting NETL Report do not justify FirstEnergy's request for DOE to prop up uneconomic coal and nuclear units in PJM.*

In an apparent effort to distinguish its request from the rejected Proposed Rule, FirstEnergy relies heavily on a recently released National Energy Technology Laboratory report ("NETL Report") that purports to find that coal-fired generating units were critical to preserving "resiliency" in PJM and other RTOs/ISOs during the "Bomb Cyclone" winter event in late December to early January.²⁵ The NETL Report's claim about the resiliency of existing coal units in PJM is based on the fact that during the Bomb Cyclone, coal generation increased more in comparison to the level of generation from December 1 through 26, 2017 than did other forms of generation. FirstEnergy extrapolates from the report that the impacts of the Bomb Cyclone show that "immediate action" to prop up uneconomic coal and nuclear units is "critical."²⁶

FirstEnergy's reliance on the NETL Report is unavailing because that report does not actually measure resilience in PJM. Instead, as Michael Goggin at Grid

Request 11, the company does not address whether that program has, in fact, increased reliability and resiliency of the grid by incentivizing many coal and gas units to weatherize and improve their preparedness for winter events.

²² Public Interest Organization Initial Comments, RM18-1-000, Appendix E, at E-15.

²³ *Id.*

²⁴ *Id.*

²⁵ FirstEnergy Request at 3-8, citing National Energy Technology Laboratory, Reliability, Resilience, and the Coming Wave of Retiring Baseload Units Volume I: The Critical Role of Thermal Units During Extreme Weather Events (Mar. 13, 2018) ("NETL Report"), available at <https://www.netl.doe.gov/research/energy-analysis/search-publications/vuedetails?id=2594>

²⁶ FirstEnergy Request at 3.

Strategies LLC has explained,²⁷ “the report employs a flawed metric of resilience that does not indicate the performance of different types of generators, but instead simply finds which energy sources are the most expensive.” In particular, coal generation was able to increase significantly during the Bomb Cyclone only because those coal units were too costly to operate earlier in December and, therefore, were either idle or only partially utilized. The fact that those idle or partially utilized coal plants increased their generation during the Bomb Cyclone shows only that those coal generators are uncompetitive unless electricity and gas prices increase significantly. Nothing in the NETL Report shows that such increased generation, or the substantially increased costs that it would entail, are necessary to ensure the resiliency or reliability of the PJM system. All bulk electric systems will have some generation that is more expensive and is therefore used primarily during peak load conditions. In PJM’s current generation portfolio many merchant coal plants function (inefficiently) as peaking units, but when those units retire others will take their place as PJM always procures enough generation capacity to meet its reserve margin requirement. In fact, PJM is currently oversupplied and has substantially more generating capacity than it needs.

The NETL Report is unhelpful to FirstEnergy’s effort to take advantage of the Bomb Cyclone because the report fundamentally misses the point. As Michael Goggin explains:

A true examination of resilience would assess actual performance in keeping the lights on for customers. Such an effort should focus on the transmission and distribution system failures that cause the vast majority of customer outages. Such an analysis would also include a range of threats to the power system.

Neither the NETL Report or FirstEnergy’s request provide such an analysis. Instead, they rely on a simplistic assessment that shows that many coal units in PJM are expensive, but fails to support FirstEnergy’s claim that they are critically needed.

In an effort to bolster its case, FirstEnergy seizes on a statement in the NETL Report that demand in PJM “could not have been met without coal” to claim that propping up coal units that are planning to retire by 2025 is necessary.²⁸ But that claim in the NETL Report, which focuses on capacity rather than generation, is meaningless because it relies on the unrealistic assumption that no other capacity

²⁷ Michael Goggin, Fossil Lab Misses Mark in Cold Weather “Resilience” Report, (Mar. 28, 2018), available at <http://sustainableferc.org/fossil-lab-misses-mark-in-cold-weather-resilience-report/>.

²⁸ FirstEnergy Request at 4, citing NETL Report at 17.

would replace the retiring coal.²⁹ In reality, substantial amounts of new generation has come online as coal units have retired over the past eight years, as PJM recently detailed:

On the resource side, it should be noted that although PJM saw about 22,000 MW of coal units retire since 2010, the capacity market attracted more than 37,000 MW of new generation since 2007, of which more than 21,000 MW of new generation was placed in service between 2010 and 2017. This has resulted in a current PJM reserve margin of 29.1 percent, which is well above the targeted reserve margin of 16.6 percent for 2017 and 16.1 percent for 2018.³⁰

There is no reason to believe that future coal and nuclear unit retirements that may occur by 2025 would not similarly be met with new resources, including renewables, demand response, and energy storage.

Echoing the NETL Report, FirstEnergy proclaims serious concerns about the fact that many of the coal units that dispatched during the Bomb Cyclone are expected to retire in the coming years.³¹ In support, FirstEnergy notes that PJM's President has recently testified that 1,410 MWs of nuclear generation and 3,688 MWs of coal generation that operated during the Bomb Cyclone is scheduled to retire in the next five years.³² The Company neglects to mention, however, that PJM went on to explain that those retiring coal units had a significantly higher forced outage rate (ranging from 16% to 31.7%) during the Bomb Cyclone than the 8% to 11.7% forced outage rate for the non-retiring coal units during that same time.³³ In other words, on the metric that FirstEnergy claims to be concerned

²⁹ NETL Report at 17 (noting that “any retiring units that were dispatched during the event would have to be replaced.”).

³⁰ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 1 from Sen. Lisa Murkowski (Jan. 23, 2018).

³¹ FirstEnergy Request at 7.

³² FirstEnergy Request at 7, citing U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

³³ U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

about—performance during extreme weather events—the coal units that the company wants to force customers to prop up fail.³⁴

Ultimately, FirstEnergy’s attempt to use the Bomb Cyclone as an excuse to bail out its coal and nuclear plants fails because the PJM systems performance during that weather event shows that there is no looming resiliency crisis. In fact, PJM itself found that:

During the recent cold snap, PJM did not call a performance assessment interval, a 72-hour maintenance recall or any transient shortage intervals. However, the system was well tested and, as detailed in this report, there were indicators of improved performance of generating resources since 2014. Overall, the grid and the generation fleet performed well. Even during peak demand, PJM had excess reserves and capacity.³⁵

The available evidence plainly shows that in a time of major changes to the energy mix in our country, PJM is ensuring system reliability and the resilience to keep the lights on even during significant weather events such as the Bomb Cyclone. No basis has been provided for disrupting that system with substantial sums of out-of-market payments that would help prop up some of the oldest and least reliable coal units in the system while filling the coffers of the merchant generating companies that own those units.

³⁴ PJM also noted that it “does not see any challenge to reliability or fuel diversity from the announced retirements.” U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Mike Lee (Jan. 23, 2018).

³⁵ PJM INTERCONNECTION, PJM COLD SNAP PERFORMANCE DEC. 28, 2017 TO JAN. 7, 2018 (Feb. 26, 2018), available at <http://www.pjm.com/-/media/library/reports-notice/weather-related/20180226-january-2018-cold-weather-event-report.ashx>. PJM has also noted that it had 5,400 MWs of emergency demand response available during the Bomb Cyclone that it did not end up needing to utilize. U.S. Sen. Comm. on Energy and Nat. Res., *The Performance of the Electric Power System in the Northeast and Mid-Atlantic During the Recent Winter Weather Events, Including the Bomb Cyclone*, Questions for the Record Submitted to Mr. Andrew Ott, Response to Question 2 from Sen. Lisa Murkowski (Jan. 23, 2018).

IV. CONCLUSION

For the foregoing reasons, Sierra Club asks the Department of Energy to promptly deny the request of FirstEnergy Solutions.

Sincerely,

/s/ Casey Roberts

Casey Roberts
Sierra Club Environmental Law Program
1536 Wynkoop St., Suite 200
Denver, CO 80202
(303) 454-3355
casey.roberts@sierraclub.org

Sanjay Narayan
Sierra Club Environmental Law Program
2101 Webster St., Ste. 1300
Oakland, CA 94612
(415) 977-5769
sanjay.narayan@sierraclub.org

Bridget Lee
Sierra Club Environmental Law Program
50 F. St., NW, 8th Floor
Washington, D.C. 20001
(845) 323-5493
bridget.lee@sierraclub.org

cc:

Bruce Walker
Assistant Secretary, DOE Office of Elec. Delivery & Energy Reliability
Office of Electric Reliability and Energy Reliability
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

Patricia A. Hoffman
Principal Deputy Assistant Secretary, DOE Office of Elec. Deliver & Energy Reliability
Office of Electric Reliability and Energy Reliability

U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

Rick C. Giannantonio
General Counsel
FirstEnergy Solutions Corp.
76 South Main Street
Akron, OH 44308

Craig Glazer
VP, Federal Government Policy
PJM Interconnection, L.L.C.
1200 G St., N.W., Ste. 600
Washington, D.C. 20005