UNITED STATES DEPARTMENT OF ENERGY

PJM Interconnection, L.L.C. Request for Emergency Order Pursuant to Section 202(c) of the Federal Power Act	)))))	Order No. 202-17-4

SIERRA CLUB'S MOTION PETITION FOR REHEARING, AND MOTION TO INTERVENE

I. STATEMENT OF ISSUES

On September 14, 2017, the Secretary of Energy, on behalf of the Department of Energy (the "Department"), has issued Order No. 202-17-4 (the "Renewal Order"), renewing its previous Order No. 202-17-2 (the "Order"). The Renewal Order determines that an emergency continues to exist in the Commonwealth of Virginia, and requires Dominion Energy Virginia ("Dominion") to operate Units 1 and 2 of the Yorktown Power Station until December 13, 2017. Sierra Club petitions for rehearing of Order No. 202-17-4, pursuant to section 313 of the Federal Power Act, 16 U.S.C. § 825l[1], on the following grounds:

- The Department's Renewal Order, like the underlying Order, is a major federal action significantly affecting the human environment. The National Environmental Policy Act consequently requires assessment of the Orders' environmental consequences. 40 C.F.R. §§ 1502.3 & 1506.11. The Department has invoked a categorical exclusion to bypass such an assessment; but that exclusion, by its terms, only applies if the operations being required are "within normal operating limits." Records of Categorical Exclusion Determination, Order No. 202-17-4 (Sept. 11, 2017) ("Exclusion Determination") 2-3. The operations required by the Department's Order and Renewal Order do not comply with applicable Clean Air Act standards, and are therefore not within normal operating limits.

- The Department has not, in issuing its Renewal Order, fully demonstrated that the Renewal Order mandates the "maximum … practicable" compliance with applicable environmental laws, or that it limits the hours of operation to those "necessary to meet" the emergency and serve the public interest, following appropriate consultation with the Environmental Protection

[1] The Department has taken the position that judicial review of those orders may be secured through section 313, 16 U.S.C. § 825l. *See, e.g.,* Order No. 202-05-3, District of Columbia Public Service Commission, Docket No. EO-05-01 (December 20, 2005)

Agency. 16 U.S.C. §§ 824a(c)(2)-(4)(b). The Department's docket does not contain materials demonstrating that the Department has fully considered all available measures of reducing the Yorktown units' pollution, or their hours of operation—especially measures that might be adopted during the extraordinarily long period of the proposed emergency.

The Department of Energy accepted Sierra Club as a party for purposes of considering its petition for reconsideration of Order No. 202-17-2, which the present Order No. 202-17-4 renews and extends. *See* Order No. 202-17-3. But because the Department has denied Sierra Club's petition regarding Order No. 202-17-2 as moot, Order No. 202-17-5, Sierra Club also repeats its request to intervene in these proceedings, to the extent such renewed intervention may be necessary.

II. BACKGROUND

On June 16, 2017, the Department issued Order No. 202-17-2, under section 202(c) of the Federal Power Act, 16 U.S.C. § 824a(c), finding that an emergency existed "[d]ue to anticipated heightened electricity demand or peak load conditions associated with hot summer weather." Order 1. The Department stated that "[e]lectric system reliability is at risk" between June 16 and September 14, 2017, because "several" reliability-planning standards, promulgated by the North American Electric Reliability Corporation pursuant to section 215 of the Federal Power Act, 16 U.S.C. § 824o, would be "implicated if Yorktown Units 1 and 2" were unavailable to the regional transmission organization (PJM Interconnection, L.L.C. ("PJM")). *Id.* at 2. Based on that determination, the Department ordered Dominion "to operate Units 1 and 2 of the Yorktown Power Station as directed by PJM only as needed to address reliability issues." *Id.*

The Department observed that PJM's application for emergency relief had "introduce[d] a 'Scenario Two,'" claiming a "need for Yorktown Units 1 and 2 during transmission outages to support construction of system upgrades previously ordered by PJM." *Id.* at 1. But the Order did not include such transmission outages within the scope of its declared emergency, instead finding that "Scenario Two will not be applicable until Dominion Energy Virginia obtains permitting approval for the [system] upgrades." *Id.* In the event that such approvals were obtained, the Department invited submission of a "renewal request," so that the Department could address that scenario. *Id.* at 2.

The Department also recognized that because the operations required by its Order would violate the Clean Air Act, the Federal Power Act required the Department to include provisions restricting the hours of such operation to the "hours necessary to meet the emergency and serve the public interest"; and to ensure that, to "the maximum extent practicable," the Yorktown units operated in a manner consistent with applicable environmental laws, and minimized

environmental impacts. *Id. See* 16 U.S.C. § 824a(c)(2). In response to those mandates, the Department requested that PJM devise a "dispatch methodology" to operate the Yorktown units "when called upon to meet reliability needs." Order at 2.

Sierra Club intervened and sought reconsideration, contending that: (1) the sparse findings contained in the Order, of themselves, did not sufficiently demonstrate that an emergency existed sufficient to empower the Department to exercise its authority under section 202(c) of the Federal Power Act, 16 U.S.C. § 824a(c); (2) that the Department's delegation to PJM of its obligation to ensure that the operations authorized by the Order complied with environmental laws to the "maximum … practicable" extent, and were limited to the hours "necessary to meet the emergency," *id.*, fell short of the law's requirements; and (3) that the Department had erred by invoking a categorical exclusion, applicable to power management activities within "normal operating limits," to avoid assessing its Order's impacts under NEPA, 42 U.S.C. § 4321 et seq. *See generally* Sierra Club's Motion to Intervene and Petition for Rehearing (Order No. 202-17-2, July 14, 2017) ("July Reh'g Pet."). The Department issued an order intended to "afford [itself] additional time for consideration" of Sierra Club's petition on August 11, 2017, Order No. 202-17-3, and denied the petition as moot on September 14, 2017, Order No. 202-17-5.

On August 24, 2017, PJM submitted a request to renew the Order. Letter from Steven R. Pincus to Hon. James R. Perry dated August 24, 2017 ("Renewal Request"). That request stated that Dominion had completed acquisition of the necessary permits for the Skiffes Creek transmission project on July 3, 2017, and begun construction of the project on July 10, 2017. *Id.* at 2-3.[2] PJM, according to the Renewal Request, expected the Skiffes Creek project to be completed "approximately 18-20 months" after permitting was complete. *Id.* at 3. PJM suggested that the construction of the Skiffes Creek was an "extended … emergency," and explained that it intended to "submit requests for renewals of the Secretary's emergency order" until the project's completion. *Id.* PJM also provided the Department with estimates as to the schedule by which it expected to operate the Yorktown units, the anticipated hours of operation, and estimated air emissions and water usage from those operations. *Id.* at 3-4 & Att. 1-2. Sierra Club submitted comments on that requested extension, to which PJM responded.

On September 14, 2017, the Department issued the Renewal Order, accompanied by a Summary of Findings ("Findings"), determining that "an

[2] PJM simultaneously submitted a report acknowledging that it had ordered Dominion to operate the Yorktown units to support construction of the Skiffes Creek Project, Letter from Steven R. Pincus to Hon. James R. Perry dated August 24, 2017 at 3, even though the Department had not authorized such construction-related operations in its Order, Order 1.

emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy." Renewal Order 1. The Renewal Order adds several modifications to the terms of the original Order. First, it expands the conditions under which the Yorktown units may be operated to include "either or both of Scenario One and Scenario Two"—that is, to address peak seasonal demand, and also outages related to the Skiffes Creek Project. *Id.* at 2.[3] The Renewal Order also expressly incorporates the terms of EPA's administrative consent order for the Yorktown units; that consent order addressed the units' initial failure to comply with the Clean Air Act, between April 2016 and April 2017. *Id.* And the Renewal Order requires PJM and Dominion, "[c]onsistent with good utility practice," to "exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 or Yorktown Unit 2." *Id.* The Renewal Order directly required Dominion to "comply with the dispatch methodology submitted by PJM on June 27, 2017." *Id.* Finally, the Renewal Order requires reports as to the Yorktown Units' operating hours, emissions, and water usage "[e]very two weeks" (the Order required a report only at the conclusion of its 90-day effective period). *Id.* The Renewal Order operates through December 13, 2017, and invites renewal requests. *Id.*

It its Findings, the Department stated that the emergency giving rise to its Orders was "the imminent possibility of implementing" a Remedial Action Plan which, in order to forestall broader damage to the electricity grid, would "leave approximately 150,000 customers without power, including residential, industrial, commercial, health and safety facilities," as well as "major national defense, and educational institutions." Findings 7. The Department clarified that the "likelihood of [the Remedial Action Plan's] activation is not theoretical," and that it had explored alternatives to use of the Yorktown units and found such alternatives "not sufficient." *Id.* at 8. The Department emphasized that "[t]he Skiffes Creek Transmission Project … is the long-term solution" to the seasonal shortages giving rise to the need for the Remedial Action Plan, *id.* at 5, and that the project was among the "firm arrangements to resolve" the emergency which are required by the Department's regulations, *id.* at 7. The Department noted the additional constraints it had added in the Renewal Order, and explained that it had "consulted with the [U.S. Environmental Protection Agency]," which was "the primary Federal agency with expertise in the environmental interest protected by [the] law or regulation" that Dominion and PJM will be violating. *Id.* at 10-11 (noting that improved "reporting requirements for operations and estimated emissions ensure transparency of implementation") (citation omitted).

[3] In its Findings, the Department clarified that "Scenario Two was contemplated but not yet applicable when Order No. 202-17-2 was issued." Findings 5.

The Department again invoked a categorical exclusion to avoid assessing the environmental impacts of its Orders, replacing its prior rationale for that invocation with a new one: that the "combined operation of Yorktown Units 1 and 2" under the Renewal Order "will be well below normal operating capacities and limits of Yorktown Units 1 and 2." Exclusion Determination 3. In support, the Department stated that its Renewal Order would: not "threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health"; require siting or expansion of any new or existing facility; "disturb hazardous substances, pollutants, or contaminants"; or "adversely affect environmentally sensitive resources." *Id.*

III. BASIS FOR INTERVENTION

Sierra Club intervened following the Department's issuance of its initial Order No. 202-17-2. On September 15, 2017, one day after the Department renewed the Order, it denied Sierra Club's petition for rehearing of that Order as moot. Order No. 202-17-5. The Department did not dismiss Sierra Club as a party to these proceedings; but, to the extent that the Department views its Renewal Order as initiating a separate proceeding from those associated with its original Order, Sierra Club reiterates the grounds for its participation in this matter.

Sierra Club members are affected by the pollution that will be produced as a result of the Renewal Order. As of September 2017, over 21,200 Club members reside in Virginia; approximately 265 of those members reside in the general vicinity of the Yorktown plant. Sierra Club members also fish in lakes and rivers that will be affected by pollution (including mercury pollution) from that plant. Sierra Club members are, furthermore, ratepayers who may be subject to increased costs as a result of the Department's Order.

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 the Yorktown plant. To that end, Sierra Club has participated in regulatory proceedings relating to the Yorktown plant. Sierra Club has also devoted substantial resources to supporting the air toxics standards that the Order allows the Yorktown plant to violate. Sierra Club has a further organizational interest in demand-side management and other non-polluting alternatives that might allow for less frequent operation of the Yorktown facility. Sierra Club has advocated for such alternatives, as part of its efforts to reduce pollution from the Yorktown plant. *See* Post-Hearing Brief of Environmental Respondents, Application of Virginia Electric and Power Co., Case No. PUE-2012-00029 (Virginia Corp. Com'n, May 23, 2013) (attached as Ex. A to July Reh'g Pet.); Comments of Environmental Respondents to the Report of Senior Hearing Examiner, Application of Virginia Electric and Power Co., Case No. PUE-2012-00029 (Virginia Corp. Com'n, August 30, 2013) (attached as Ex. B to July

Reh'g Pet.). And Sierra Club intervened following the Order that the Renewal Order extends, and submitted comments as to the request giving rise to the Renewal Order.[4]

IV. REQUEST FOR RECONSIDERATION

The Renewal Order and supporting Findings usefully clarify the basis of the Department's exercise of its emergency authorities, and add limitations and reporting provisions; together, those additions address many of the concerns raised in Sierra Club's earlier administrative filings. Despite those changes—and with no diminution of our appreciation for them—we seek reconsideration of the following two elements of the Department's Renewal Order.

A. The Department Should Assess the Impacts of Its Action Under the National Environmental Policy Act

The Department's Order and Renewal Order are major federal actions significantly affecting the environment, within the meaning of NEPA. 42 U.S.C. § 4321 *et seq.*; 40 C.F.R. § 1502.3. As PJM's renewal request indicates, the Yorktown units are expected to produce large quantities of toxic pollution. The Yorktown units' emissions of mercury are expected to be 3.3068 lb/Tbtu—275% of the applicable limit of 1.2 lb/Tbtu. Renewal Request Att.1 & 40 C.F.R. Pt. 63 Subpt. UUUUU Table 2. Similarly, their emissions of hydrochloric acid gas (a surrogate for other acidic air toxics) are expected to be .0478 lb./Mmbtu—nearly 24 times the applicable limit of .002 lb/Mmbtu. *Id.* Over the course months during which PJM expects the units to operate, PJM estimates emissions of nearly 14 pounds of mercury. *See* Renewal Request Att. 2. Those emissions will have a significant impact. Mercury is a potent neurotoxin, hazardous to human health even in very small quantities. *See* 76 Fed. Reg. 24,976, 25,000 (May 3, 2011) (noting reference dose of .0001 mg/kg-day; exposures above that level raise health concerns). PJM also estimates that the units will produce nearly 100 tons of HCl, Renewal Request Att. 1; HCl and the other acid gases for which it is a surrogate cause acute and chronic health harms, including respiratory distress and disease. *See* 76 Fed. Reg. at 25,050.

The public health impacts of the Yorktown' units air toxics are well documented. EPA included the Yorktown plant in a case study of health risks posed by non-

[4] Dominion's prior filings suggest that this bears repeating: for the reasons described here, Sierra Club is an aggrieved party under section 313 of the Federal Power Act, 16 U.S.C. § 825l. *See* Motion of Virginia Electric & Power Co. to Strike the Procedurally Deficient Petition for Rehearing, or, in the Alternative, Motion for Leave to Answer and Answer of the Virginia Electric & Power Co. (Order No. 202-17-2, August 1, 2017) 2-3.

mercury hazardous air pollutants from coal-fired power plants. Memorandum from Madeleine Strum, James Thurman, and Mark Morris to Docket EPA-HQ-OAR-2009-0234 dated March 16, 2011 (Ex. E). EPA examined the Yorktown units because, *inter alia,* they were among "the highest risk facilities" in the nation in their contribution to "cancer and non-cancer risks." *Id.* at 1. And EPA's modeling of the Yorktown plant's emissions—which EPA acknowledged likely "underestimate true maximum risks"—indicates that those emissions produce significant cancer risks amongst the surrounding population (that is, a lifetime risk greater than one in one million). *Id.* at 14.

Despite those adverse effects, the Department is continuing to invoke a categorical exclusion for "power management activities … *provided that the operations of generating projects … remain within normal operating limits*." Finding 10; Exclusion Determination at 2 (emphasis added). By their terms both the Order and Renewal Order require operations that are "in noncompliance with" applicable Clean Air Act standards—specifically, air toxics standards governing coal-fired electric generating units, 40 C.F.R. Pt. 63 Subpt. UUUUU. 16 U.S.C. § 824a(c)(3). Indeed, the units' inability to meet the normal, governing limits is the *raison d'etre* for both the Order and its renewal. *See* Letter from Steven R. Pincus to Hon. James R. Perry dated June 13, 2017 at 12 (requesting emergency relief because "[i]t is PJM's and Dominion Energy's understanding that …. PJM's decision to operate, and Dominion Energy Virginia's operation of the Yorktown Units in accordance with a [Department] order issued pursuant to … section 202(c) will result in emissions but such emissions shall not be considered a violation of any federal, state, and local environmental laws or subject PJM or Dominion Energy Virginia to … liability"). The required operations are consequently not within "normal operating limits." Exclusion Determination 2.

The Department's Exclusion Determination states—without further explanation—that the "combined operation of Yorktown Units 1 and 2 … will be well below normal operating capacities and limits of Yorktown Units 1 and 2." *Id.* at 3. Under normal, non-emergency conditions, however, the Yorktown Units cannot run at all; that is why the Department has issued its Orders. *See* Findings at 1-2 (In 2011 and 2012 "Dominion notified PJM of its plan to deactivate Units 1 and 2 ... effective December 31, 2014, because the units were not equipped to comply with the Environmental Protection Agency's … Mercury and Air Toxics Standards."). The operations required by the Renewal Order are therefore not below the normal operating capacity of the units—and they are certainly not below the normal *limits* governing the operations of coal-fired power plants. 40 C.F.R. Pt. 63 Subpt. UUUUU Table 2. *See* above at p.6. The units may be physically capable—if one ignores the legal limits that would otherwise govern—of operating at greater capacity; but that does not render the prescribed operations within "normal operating *limits*." Exclusion Determination 3 (emphasis added).

Under the Federal Power Act, actions "necessary to comply with [an emergency] order" which result in "noncompliance with … Federal, State, or local environmental law[s] or regulation[s] …shall not be considered a violation" or result in "civil or criminal liability, or a citizen suit under such environmental law or regulation." 16 U.S.C. § 824a(c)(3). *Cf.* Exclusion Determination 3 (stating that operations will not "threaten a violation of applicable statutory, regulatory, or permit requirements …"). The Department may, nevertheless, not treat operations that transgress Clean Air Act regulations as complying with normally applicable limits. Emissions which exceed air-toxics standards are not within normal operating limits—even if excused on an emergency (and thus definitively abnormal) basis. "[N]oncompliance" with federal laws is sufficient to demonstrate that the required operations are outside normal limits, whether or not such non-compliance is "considered a violation," or gives rise to liability or citizen suit. 16 U.S.C. § 824a(C)(2).[5]

The Council on Environmental Quality has established procedures to comply with NEPA even under emergency conditions. 40 C.F.R. § 1506.11. As those procedures recognize, emergencies may demand "alternative means of NEPA compliance," but they do not "waive the requirement to comply with NEPA." Memorandum for Heads of Federal Departments & Agencies from Nancy H. Sutley (attached to Sierra Club's July Reh'g Pet. as Ex. D). The long anticipated, and extraordinarily "extended nature" of the emergency in question provides ample time for compliance with NEPA, Renewal Request 3. And such compliance could meaningfully inform the numerous subsequent renewals that may be reasonably expected to occur; it would, in particular, enable further exploration of the

[5] The Department's decision to invoke a categorical exclusion for its initial Order cited EPA's administrative consent order. The Department has replaced that decision with the current Exclusion Determination, which does not make any reference to the administrative consent order. Consequently, we understand the Department to have abandoned any rationale related to that consent order. And in any event, the consent order provides a remedy for violations of the Clean Air Act; it does not transform the Yorktown units' non-compliant emissions into compliance with normal operating limits. *In re. Virginia Elec. & Power Co.*, AED-CAA-113(a)-2016-0005 (April 11, 2016) at 2 (Yorktown units "will not be able to comply" with air toxics standards). Likewise, EPA's use of a categorical exclusion governing certain "action[s] taken under the Clean Air Act," when it entered its administrative consent order, does not justify the Department's decision. Neither the Order nor the Renewal Order was taken under the Clean Air Act. *See* 15 U.S.C. § 793(c)(1) ("No action taken under the Clean Air Act … shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of [NEPA].") (We also incorporate by reference section IV.C of Sierra Club's petition for rehearing of the Order submitted on July 13, 2017).

mitigation measures described in the following section. The Department's failure to undertake further analysis violates NEPA.

B. The Department Should Add Further Measures to Reduce the Units' Hours of Operation and Emissions.

The Federal Power Act mandates that the Department's Order ensure the "maximum … practicable" compliance with environmental laws, "minimize[] any adverse environmental impacts," and limit the hours of operation to those "necessary to meet the emergency and serve the public interest." 16 U.S.C. § 824a(c)(2). To satisfy those requirements, the Order: (1) allows operation only at PJM's direction; (2) directs PJM and Dominion to exhaust all other "reasonably and practicably" available resources prior to the units' dispatch[6]; and (3) requires adherence to PJM's dispatch methodology. Findings 9. Those conditions improve the Department's ability to reduce the units' pollution; but the Order still falls short of the statutory standards.

The Department states that "the only appropriate short-term emissions limitation on Yorktown Units 1 and 2 would be to curtail operating hours to the maximum extent practical for reliability purposes." Findings 10. As an initial matter, while the Department asserts that it arrived at this conclusion "[a]fter consulting with EPA," and "consistent with that consultation," the record does not clearly indicate that EPA has itself found that the conditions in the Order provide the maximum practicable environmental protections. The Federal Power Act demands that the Department consult with EPA, and include in its renewal "such conditions as [EPA] determines necessary to minimize any adverse environmental impacts to the extent practicable." 16 U.S.C. § 824a(4)(B). And the Department may exclude a condition that EPA deems necessary only if the Department determines that the condition would "prevent the order from adequately addressing the emergency," with an explanation. *Id.*

The 'consultation' in the docket, however, is only EPA's statement that the Department's "proposed operational conditions for the order are generally consistent with EPA's Administrative Compliance Order, AED-CAA-113(a)-2016-002, as amended." E-mail from Lawrence Starfield to Patricia Hoffman dated Sept. 11, 2017. That does not substitute for EPA's determination that the conditions in the Order minimize adverse environmental impacts to the maximum extent practicable. 16 U.S.C. § 824a(c)(4)(B).[7] Furthermore, the docket includes nothing

[6] The reports required by the Order do not appear to include material related to this requirement. In order to give it meaning, the Department should require Dominion and PJM to describe their efforts to dispatch other resources.

[7] EPA policies required Dominion, when it sought the administrative consent order, to identify operational limits and/or work practices to minimize or mitigate

describing what other options the Department considered, or the grounds on which it deemed those options infeasible. *See, e.g.,* Letter from Sanjay Narayan to Hon. James R. Perry dated September 6, 2017 at 5 & n.8 (noting "mobile coal-treatment units" to reduce mercury emissions). The Department's determination that curtailment of the Yorktown units' operating hours is the only practicable means of reducing their environmental impact, and their violations of the Clean Air Act, requires some reasoned explanation—but such an explanation is absent from the docket.

Moreover, even if curtailing the hours of the Yorktown units' operation is the only practicable means of mitigating their pollution, the extended period over which the emergency is expected to extend—18 to 20 months, at a minimum—allows for measures beyond those included in the Renewal Order. The Department addresses only the demand-side and distributed-generation resources in place prior to the Orders' issuance; it has not enquired as to the steps Dominion (or PJM) might take *over the course* of the emergency to expand those resources, such as expanded utility demand-response programs, or incentives to attract private development of distributed generation resources. Findings 8-9. From start to finish, the Department is expected to require the Yorktown units to operate for nearly two years—far more time than utilities have, elsewhere, taken to deploy cost-effective demand-side and distributed energy resources. Comments of Ariel Horowitz, PhD ("Horowitz Comments," attached as Ex. F) 15-20 (noting rapid acquisition of demand-side resources and non-wire alternatives by, *inter alia,* Bonneville Power Administration, Arizona Public Service, and Southern California Edison). The Hampton Roads area includes several very large customers, facilitating effective demand-side solutions; programs instituted for a single major facility would greatly reduce the need for additional generation. *Id.* at 16-17. The demand response and distributed generation resources mentioned in the Renewal Order are, in addition, not the only available options; energy storage can be rapidly deployed, and has proven vital in preserving grid reliability under similar conditions elsewhere. *Id.* at 18-19.

The addition of such resources could meaningfully reduce the hours of the Yorktown units' operation. Prior emergency orders—including the Mirant order that the Department cites as precedent for these Orders, Findings 8—included requirements to investigate and procure such additional resources over the course of the emergency. Order No. 202-05-3 (December 20, 2005) at 9 (instructing utility

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emissions of hazardous air pollutants. Memorandum from Cynthia Giles to Regional Administrators (Dec. 16, 2011) 7. But nothing in the record demonstrates that EPA reached an independent conclusion as to the conditions that might provide the maximum practicable public-health protections here—especially for the time period that the Yorktown Units will be operating, which extends well beyond the time-frame envisioned by the administrative consent order.

to "expedit[e] approval of … transmission system upgrades and institut[e] demand response programs").

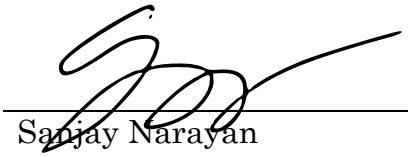
There is, furthermore, strong evidence that such measures will prove cost-effective, and in the public interest. *See* 16 U.S.C. § 824a(c)(2) (hours to be limited to those necessary to "serve the public interest"). The Yorktown units are inflexible and expensive, and therefore particularly ill-suited to emergency dispatch. Horowitz Comments 12-15. Dominion (and its ratepayers) will likely to incur costs of at least $500,000 per month to operate the units in the manner contemplated by PJM's dispatch methodology. *Id.* at 14. Even moderate reductions in the need for the units could, consequently, generate substantial financial savings as well as public-health benefits. *See, e.g,. id.* at 19-20 (noting that battery systems, combined with demand-side programs and local distributed generation, could eliminate need to run Yorktown units during some contingencies for which PJM currently plans to operate units). Distributed generation, demand-side, or battery-storage programs will, moreover, continue to benefit the public well after the completion of the Skiffes Creek project. *Id.* at 20. Especially given the very long duration of the Skiffes Creek project, the costs of storage, demand-side, or distributed-generation resources is likely to be offset by the long-term operational and financial benefits of those alternative resources. *Id.* at 20-21. The pollution reductions that would be achieved by such alternatives are consequently likely to entirely practicable. The Department should, for all of these reasons, reconsider its failure to consider such alternatives.[8]

V. CONCLUSION

The Department has, in the Renewal Order, meaningfully clarified the basis of its actions, and improved its oversight of the Yorktown units' operation. Sierra Club asks, however, that the Department reconsider the terms of its Order, for the reasons stated above.

[8] At a minimum, the Department should require a near-term study of alternative resources, and the extent to which they could reduce the need to operate the Yorktown Units. *See* Horowitz Comments 20-21.

Respectfully submitted on October 5, 2017, by:



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