UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

	) Project Nos.
EXELON GENERATION COMPANY, LLC	) P-405-106
CONOWINGO HYDROELECTRIC PROJECT	) and
	) P-405-121

PETITION FOR REHEARING OF FERC'S ORDER ISSUING NEW LICENSE

Intervenors Waterkeepers Chesapeake, Lower Susquehanna Riverkeeper, ShoreRivers,[1] and Chesapeake Bay Foundation, Inc. respectfully petition for rehearing of FERC's March 19, 2021 Order ("Order") issuing a new 50-year license to Exelon Generation Company, LLC ("Exelon") for Conowingo Hydroelectric Project No. 405 ("Conowingo Dam" or "the Dam"). For the reasons given below, Petitioners request that FERC vacate the Order.

BACKGROUND

I. Maryland's Water Quality Certification for the Conowingo Dam.

In 2017, Exelon applied to the Maryland Department of the Environment ("MDE") for a water quality certification under Clean Water Act § 401 that would

[1] ShoreRivers is host to four Waterkeeper organizations: the Miles-Wye Riverkeeper, the Choptank Riverkeeper, the Chester Riverkeeper, and the Sassafras Riverkeeper. All four Riverkeeper organizations within ShoreRivers are active members of Waterkeepers Chesapeake.

allow it to obtain a new 50-year license for the Conowingo Dam. Exelon Generation's Application for a Maryland Water Quality Certificate for the Conowingo Hydroelectric Project (May 17, 2017) ("Application"). Less than one year later, MDE granted Exelon's application and issued the certification. Clean Water Act Section 401 for the Conowingo Hydroelectric Project (April 27, 2018) ("Certification"). The Certification included several findings about the severe impacts that the Dam's operations have on the Susquehanna River and the Chesapeake Bay.

Among other things, MDE found the Dam "has significantly and adversely impacted biota in the Lower River and the northern Bay over the past 90 years of operation, as a result of: (i) its highly unnatural operational flow regimes; (ii) the Dam serving as a barrier to fish passage upstream; and (iii) the Dam serving as an obstacle to fish passage and coarse-sediment transport for habitat downstream." Certification at 11. It found "[a]s currently operated, the Project's peaking flow regime, characterized by drastic daily changes in water depth below the Dam and velocities of discharge over a period of one hour, continues to cause fish kills downstream by stranding fish in shallow pools with insufficient water and subjecting them to increased threat of predation. The flow regime also delays upstream movement of important migratory spawning species such as Shad and

Herring, and adversely impacts downstream habitat and the integrity of the downstream aquatic system." *Id.*

MDE found that "millions of Shad and Herring should be passing upstream in the River every year" as well as "[m]illions of Eel" but that in 2017 "only 15,000 Shad and 65 Herring passed the Dam" and only "thousands" of Eel. *Id.* at 12. In 2019, only 4,787 Shad passed the dam, and in 2020, only 485. Exelon, Conowingo Hydroelectric Project (P-405) COVID-19 Update (June 5, 2020); Timothy Wheeler, *Snakeheads shut down late-starting shad lift at Conowingo Dam*, Bay Journal (May 27, 2020). It further found that by preventing Eel from passing upstream, the Dam has caused freshwater mussel to "decline[] dramatically"; instead of numbering in the "tens of millions," the freshwater mussel population both above and below the Dam now "is considered unviable." *Id.* As MDE has explained, mussels, "provide important ecosystem services of filtration and transformation of sediment and nutrient pollution." *Id.* By making this natural filtration system "unviable," the Dam exacerbates the nutrient loading problems that its discharges cause.

MDE further found "[a]lthough the Dam has in the past trapped and stored sediment and nutrients and served as a barrier to downstream transport to the Bay, the Reservoir is now full, as no efforts have been undertaken over the life of the Project, such as routine dredging, to maintain any trapping function." *Id.* "As a

result, sediments and nutrients move downstream, and during large storm events, significant amounts of trapped sediment and nutrients are scoured from the behind the Dam and discharged downstream. By releasing significant amounts of sediment and nutrients through scouring during storm events, the Dam has altered the nature, timing, and delivery method of these materials with adverse consequences for the Lower River and the Bay." *Id.* To address these impacts and the many other serious impacts caused by the Dam and identified specifically in the Certification, MDE established several requirements.

MDE recognized that there are "elevated" levels of both polychlorinated biphenyls ("PCBs") and chlorophyll-A both above and below the Dam. *Id.* at 12. PCBs are an extremely toxic and bioaccumulative pollutant that can make the fish in a body of water unsafe to eat. Chlorophyll-A is found in algae that can make water unsuitable for drinking water uses and also kill fish.

To address these and the many other adverse impacts of the Dam, the Certification establishes requirements to be included in the Dam's license under Clean Water Act § 401, 33 U.S.C. § 1341.

To address the nutrient discharges from the Dam, their adverse impacts on the Susquehanna River and the Chesapeake Bay, and the resulting harms to aquatic life, the Certification requires Exelon to reduce the amount of nitrogen in the Dam's yearly discharges by 6,000,000 pounds and the amount of phosphorous by

260,000 pounds. *Id.* at 15. Alternatively, it allows Exelon to make payments in lieu of these pollution reductions, in the amount $17 per pound of nitrogen and $270 per pound of phosphorous. Over the 50-year license, the money value of the combined nutrient reductions (or payments in lieu of such reductions) is approximately $8.6 billion. Comments of Waterkeepers Chesapeake and Lower Susquehanna Riverkeeper on Proposed Settlement Agreement, January 17, 2020 ("Comments") at 11.

To address the Dam's adverse impacts on water levels and velocities in the lower Susquehanna River, the Certification establishes a flow regime that will increase minimum flows and significantly reduce the drastic flow fluctuations that harm aquatic life below the Dam. These changes in depth and flow velocity have, as described below, obliged Maryland to list the lower Susquehanna as "impaired" under the Clean Water Act. While the Dam's previously allowed minimum flows as low as 0 cubic feet per second ("cfs") to 10,000 cfs throughout the year—with no limits on up or down ramping flows or on maximum flows, EIS at 145-46, Table 3-19, the Certification's flow regime requires higher minimum flows—sometimes two to three times higher; limits on up ramping, down ramping; and limits on maximum flow. Certification at 4-2 (Year 10 Flow Regime). By Exelon's own assessment, the Certifications flow regime would have substantial benefits to

available fish habitat. Exelon Application, Instream Flow Habitat Assessment Below Conowingo Dam, Table 5.1-2 (comparing flows).

Further, to address the Dam's severe impacts on fish passage, it requires Exelon to take actions necessary to assure that 5,000,000 Shad and 12,000,000 Herring are able to pass the Dam each year, rather than the approximately 15,000 Shad and 65 Herring that were able to pass the Dam in 2017. Certification at 12. To address chlorophyll-A, the Certification requires Exelon to monitor and report chlorophyll-A levels in the reservoir behind the dam and to reduce those levels if the monitoring data show they violate water quality standards. *Id.* at 18. It also requires Exelon to reimburse Baltimore if Baltimore uses water from the reservoir and incurs elevated treatment costs as a result of elevated chlorophyll-A levels. *Id.* at 18-19. Although the Certification does not impose requirements related to PCBs, it reserves the right to require Exelon to sample PCBs levels in the sediment of its reservoir and to reduce PCBs levels in the Dam and its discharges to the Susquehanna River. *Id.* at 19.

II. Listing of the Lower Susquehanna As Impaired.

Also in 2018, MDE issued the biennial report required by Clean Water Act §§ 303(d), 305(b) and 314, 33 U.S.C. §§ 1313(d), 1315(b), 1324. Maryland's Final 2018 Integrated Report of Surface Water Quality (October 23, 2018) ("Final Impairment Report"). A primary purpose of this report is for MDE to list the

Maryland waters that are "impaired" – *i.e.*, not meeting Maryland's water quality standards. *Id.* at 10.

The Report states that the harm caused by the Conowingo Dam is "one of Maryland's major water quality concerns" and that the buildup of sediments and nutrients behind the Dam "poses a major threat to Chesapeake Bay restoration efforts." *Id.*at 38. Like the Certification, it finds "the extreme flow fluctuations due to the current operation of the dam" harm aquatic life, *id.* at 127, and that "high flow scouring events have the potential to deliver large pulses of sediment (and associated nutrients) downstream that can have significant negative impacts to biological resources," *id.* at 133. *See generally id.* at 126-136. Based on these findings, MDE listed the Susquehanna below the Dam as impaired "due to pollution caused by flow alteration." *Id.* at 134-135. In 2019, the U.S. Environmental Protection Agency approved MDE's action. Letter of April 9, 2019 from Liebertz to Curry ("EPA Approval Letter"). The lower Susquehanna and the Conowingo Dam area have been listed for PCBs since 2002 and 2008 respectively. Final Impairment Report at 71-72.

III. Maryland's Watershed Implementation Plan for the Chesapeake Bay Watershed.

Shortly after EPA approved MDE's listing of the Susquehanna River as impaired by the Conowingo Dam, MDE issued its Final Phase III Watershed Implementation Plan To Restore Chesapeake Bay by 2025 (August 23, 2019)

("Watershed Implementation Plan"). This document looks more broadly at all the factors impacting the health of the Bay and "charts a course" for Maryland to achieve compliance with the Total Maximum Daily Load ("TMDL") established for the Bay in 2010. *Id.* at 4. In particular, it focuses on the reducing the load of "nutrients" – nitrogen and phosphorous – that are flowing into the Bay and preventing it from achieving water quality standards. One of the three main "challenges" to this goal is "the Conowingo Dam." *Id.* at 10-11.

MDE states that even "after full Phase III WIP implementation,"

> Bay jurisdictions need to achieve an additional watershed-wide reduction of 6 million pounds of nitrogen per year and 0.26 million pounds of phosphorus per year. This additional reduction is needed to mitigate the increased pollution from Conowingo Dam infill and meet downstream WQS. Through Clean Water Act Section 401 water quality certification (WQC) authority, Maryland has assigned the responsibility of this pollution reduction to Exelon, Conowingo Dam's operator.

Id. at 11 (emphasis added). Thus, MDE's final plan to bring the Chesapeake Bay into compliance with water quality standards depends not only on reducing the load of nutrients that enters the Bay from sources throughout the Chesapeake Bay Watershed but also on Exelon achieving significant reductions in the nutrients that the Dam discharges during scour events. *Id.* MDE explains that these reductions are needed "to mitigate the water quality impacts of the Dam's lost trapping capacity" which "threatens the ability of both the state and the region to meet their Chesapeake Bay cleanup goals." *Id.* at 40.

IV. Private Settlement Between Exelon and Maryland.

After MDE issued the Certification in 2018, Exelon's response was not to bring its Dam into compliance with the Certification's requirements or contribute to restoring the lower Susquehanna River and the Chesapeake Bay. Instead, Exelon filed four legal challenges to the Certification: (1) an action for declaratory judgment by FERC that Maryland had involuntarily waived its opportunity to issue a § 401 certification under *Hoopa Valley Tribe v. FERC*, 913 F.3d 1099 (D.C. Cir. 2019); (2) an administrative request for reconsideration before MDE; (3) a lawsuit in Maryland state court; and (4), a lawsuit in the U.S. District Court for the district of Columbia. While these legal actions were pending, Exelon and Maryland entered into private settlement discussions that excluded virtually all of the people who are impacted by the Dam and the adverse impacts on the Susquehanna River and the Chesapeake Bay that Maryland has identified in the Certification and the Final Impairment Report. Among the people and groups excluded from the settlement negotiations were Petitioners (Waterkeepers Chesapeake, Lower Susquehanna Riverkeeper, ShoreRivers) as well as the Chesapeake Bay Foundation, the Nature Conservancy, the Clean Chesapeake Coalition, and the Delmarva Fisheries Association, all of which had worked on the Conowingo Dam relicensing process for years.

In October 2019, just months after EPA approved Maryland's finding that the operations of the Conowingo Dam impair the Susquehanna River, Exelon and Maryland announced that they had reached a private settlement in the FERC action. Water Quality Settlement by and between State of Maryland Department of the Environment and Exelon Generation Company, LLC (October 29, 2019) ("Settlement").

For its side of the deal, Maryland agreed that if FERC approved the Settlement it would "waive its rights to issue a CWA Section 401 certification." Settlement at 1-2, 13. The Settlement does not explain why Exelon and Maryland believe that having Maryland waive such rights now – after it has already issued a § 401 certification – is relevant. Their apparent assumption in the Settlement, however, is that this agreement relieves FERC of its obligation to include the Certification as a condition of any license for the Dam and relieves Exelon of any obligation to meet the requirements that Maryland established in the Certification to assure that the Dam's operations would comply with water quality standards.

MDE also agreed not to use its authority to reduce discharges from the Dam and mitigate the Dam's adverse impacts under other provisions of the Clean Water Act. For example, MDE could establish requirements related to flow, nutrients or sediment under the National Pollutant Discharge Elimination System ("NPDES") program but, under the settlement, MDE largely agreed to give these authorities up

for the entire 50-year license period for the Dam even if it learns that additional requirements are necessary to protect the Susquehanna River or the Chesapeake Bay. *Id.* at 17. Among other things, MDE largely agreed to give up its ability to require Exelon to sample, monitor, report, or reduce the levels of chlorophyll-A and PCBs in the water and sediment in its reservoir and in its discharges. *Id.* at 12, 16-17. Indeed, MDE agreed that if another state or person commences proceedings against Exelon based on Exelon's non-compliance with water quality standards, it will represent that Exelon is in compliance with those standards – whether or not that is true. *Id.*

For its side of the deal, Exelon agreed to do significantly less to clean up the Susquehanna River and the Chesapeake Bay than is required by the Certification.

For example, the Settlement does not require Exelon to reduce the nutrients and sediment that it has allowed to build up behind the Dam at all. Nor does it require Exelon to contribute money to fund the reduction of nutrients and sediments. Instead, it requires only payments of $2 million for the first and second year, $500 thousand in the third year, and $250 thousand annually after that to fund mussel restoration projects – figures that amounts to less than $16 million over the 50-year license period, less than two percent of the $8.6 billion required by the Certification.

With respect to flow fluctuations, the Settlement also requires considerably less of Exelon than the Certification. For the first three years, it allows minimum flow levels that are significantly less than MDE determined necessary to meet water quality standards. For example, whereas MDE's Certification requires a minimum flowrate of 18,200 cfs necessary in April and May, Certification at 14-15 & Att. 4—when Herring and Shad migrate downstream, *id.* at 1-22, App. D to Att. 1—the Settlement allows the lesser of 10,000 cfs or natural inflow in April and only 7,500 cfs or natural inflow in May—less than half the flow the Certification required. *See* Settlement at 10-12 & Att. A at 1. After ten years, whereas MDE's Certification requires a minimum flowrate of 29,000-35,000 cfs to be necessary during the months of April and May, Certification at 14-15 & Att. 4, the Settlement allows "18,200 cfs or natural inflow, whichever is less." Settlement at 10-12 & Att. A at 1. In January and February, the Certification requires roughly three times the flow that the Settlement allows. Certification at 14-15 & Att. 4 (11,000 cfs and 12,500 cfs); Settlement at 10-12 & Att. A at 1 (4,000 cfs). And, in every month, the Settlement allows Exelon to ignore required minimum flows when inflow is low, Settlement at 10-12 & Att. A at 1 (requiring limit "or natural inflow, whichever is less"), whereas the Certification establishes a floor on flows regardless of what the "natural inflow" is. Certification at 14-15 & Att. 4.

And unlike the Certification, which requires Exelon to assure that 5,000,000 Shad and 12,000,000 Herring are able to pass the Dam each year, Certification at 13, the Settlement does not require Exelon to assure that these species are able to pass the Dam at any particular rate – leaving it entirely possible that the dismal 2017 rate of 15,000 Shad and 65 Herring continues or gets even worse over the 50-year license period. *Id*. at 12.

V. Changed Circumstances and New Information Regarding Climate Change and Dredging.

While the settlement was pending, FERC received additional information regarding both the increased impacts that the Conowingo Dam has on the Susquehanna River and the Chesapeake Bay as a result of global warming and the availability of dredging as a measure to mitigate these impacts. Comments of Waterkeepers Chesapeake and Lower Susquehanna Riverkeeper on Proposed Settlement ("Waterkeepers Comments"); Comments of The Nature Conservancy on Offer of Settlement ("TNC Comments"); Chesapeake Bay Foundation, Inc.'s Comments on Offer of Settlement ("CBF Comments"); Intervenors' Response In Opposition To The Joint Motion Of Maryland Department Of The Environment And Exelon Generation Company, LLC For Ruling On The Joint Offer Of Settlement And Issuance Of License ("Waterkeepers Answer"); The Nature Conservancy's Answer To Joint Motion For A Ruling On Joint Offer Of Settlement And Issuance Of License ("TNC Answer").

FERC received information showing the Dam's impacts will be significantly worse than it had estimated when it prepared an environmental impact statement for the project in 2015. In particular, "scour events" – where storms scour major quantities of nutrients and sediment trapped by the Dam and wash them over the Dam – will increase in both frequency and severity as climate change causes more frequent and larger storms to occur:

> Scoured loads deliver much greater quantities of sediment and nutrients to the Lower Susquehanna River and Chesapeake Bay than the natural loading that would have occurred during the same flow events had the Project not been in place. The resulting excessive concentrations of sediment and nutrients impair aquatic wildlife habitat by fueling excessive algae growth, blocking light penetration that is critical to underwater life, and physically smothering sensitive aquatic life, including underwater vegetation and oyster beds.25 Particularly in the case of very large storms, scouring of the Project's sediment accumulation could overwhelm pollution reduction efforts undertaken upstream in the Lower Susquehanna River watershed, and set water quality and the growth of underwater grasses in the Susquehanna Flats and Chesapeake Bay back for decades.

Waterkeepers Comments at 7. Further, rising water temperatures will exacerbate the effects of the additional nutrients flowing into the Bay. TNC Answer at 11-13 & Att. 2.

FERC also received information showing that dredging is significantly cheaper and more effective than it recognized when it completed the environmental impact statement ("EIS") for the Dam in 2015. The new information shows that a dredging program can meet the nutrient reduction requirements identified in the Watershed Implementation Plan, 6 million pounds of nitrogen and 260,000 pounds

of phosphorous each year. Waterkeepers Comments, Ex. M at 7; Watershed Implementation Plan at 11. This program, which has been demonstrated and applied already at other sites, would cost $41 million per year, a sum that is far less than FERC's upper bound estimate of $267 million per year. Waterkeepers Comments, Ex. M at 7.

VI. FERC's Order.

In March of this year, FERC granted Exelon a 50-year license for the Dam. Order Issuing New License 174 FERC ¶ 61,217 (March 19, 2021) ("Order"). Although the Settlement provides only that Maryland shall "waive its rights to issue a CWA Section 401 certification," Settlement at 1-2, 13, FERC's Order assumes this provision effectively revokes the Certification. FERC states "MDE is waiving water quality certification in this proceeding" and, therefore, there are no certification conditions required to be included in the license. Order at ¶ 76.

The practical effect of FERC's order is to remove all the requirements MDE found necessary to assure the Dam's compliance with water quality standards from the Dam's license. FERC makes no claim that the conditions in its license will ensure the Dam complies. Far from it, FERC insists the Dam's compliance with water quality standards is irrelevant to its licensing decision:

> The Commission has explained that if certification is waived, the licensee is not compelled to construct, operate, or maintain a hydroelectric project in a manner consistent with state water quality standards unless the Commission includes such a requirement in the license. The Commission has conducted

> its own analysis of the water quality impacts of the project as proposed and is requiring those measures we deem necessary to protect aquatic resources. No more is required.

Id.

CONCISE STATEMENT OF ERRORS

Pursuant to FERC Rule 713(c)(1), 18 C.F.R. § 385.813(c)(1), Petitioners submit the following concise statement of FERC's errors in the Order. As explained in detail below, FERC lacks statutory authority to issue a license for the Conowingo Dam without including the Certification that MDE issued in 2018 as a condition of that license, and it contravenes the Clean Water Act and acts arbitrarily by doing so. In addition, FERC contravenes the Federal Power Act and the National Environmental Policy Act ("NEPA") and acts arbitrarily by failing to give adequate consideration to the environmental impacts of issuing the license without including the requirements of the Certification as a condition and by failing to supplement its environmental impact statement (EIS) for the Dam based on the significant new circumstances and information that have emerged since FERC issued the EIS in 2016.

STATEMENT OF ISSUES

Pursuant to FERC Rule 713(c)(2), 18 C.F.R. § 385.713(c)(2), Petitioners submit the following list of issues and representative precedent.

I. Whether FERC Contravened Clean Water Act § 401(d) or Acted Arbitrarily by Refusing To Include the Certification as a Condition of Exelon's License.

Statutes

33 U.S.C. § 1341(d)

Representative Court Decisions

Alcoa Power Generating, Inc. v. FERC, 643 F.3d 963 (D.C. Cir. 2011)

American Rivers v. FERC, 129 F.3d 99 (D.C. Cir. 1997)

PUD No. 1 of Jefferson Cnty. v. Wash. Dep't of Ecology, 511 U.S. 700 (1994)

State of N.C. v. FERC, 112 F.3d 1173 (D.C. Cir. 1997)

United States v. Gonzales, 520 U.S. 1 (1997)

City of Tacoma, Washington v. FERC, 460 F.3d 53 (D.C. Cir. 2006)

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)

Transactive Corp. v. U.S., 91 F.3d 232 (D.C. Cir. 1996)

II. Whether MDE Has Statutory Authority to Waive an Existing § 401 Certification and Whether FERC Exceeded its Statutory Authority, Contravened the Clean Water Act, or Acted Arbitrarily by Issuing a License for the Conowingo Dam Even Though a Certification Has Not Been Waived as Provided By Clean Water Act § 401(a).

Statutes

33 U.S.C. § 1341(a)

Representative Court Decisions

Alcoa Power Generating, Inc. v. FERC, 643 F.3d 963 (D.C. Cir. 2011)

American Rivers v. FERC, 129 F.3d 99 (D.C. Cir. 1997)

State of N.C. v. FERC, 112 F.3d 1173 (D.C. Cir. 1997)

Dodd v. U.S., 545 U.S. 353 (2005)

Tesoro Alaska v. FERC, 778 F.3d 1034 (D.C. Cir. 2015)

Atl. City Elec. Co. v. FERC, 295 F.3d 1 (D.C. Cir. 2002)

Keating v. FERC, 927 F.2d 616 (D.C. Cir. 1991)

Rotkiske v. Klemm, 140 S. Ct. 355 (2019)

Barnhart v. Sigmon Coal, 534 U.S. 438 (2002)

Russello v. United States, 464 U.S. 16 (1983)

TRW, Inc. v. Andrews, 534 U.S. 19 (2001)

Sierra Club v. EPA, 985 F.3d 1055 (D.C. Cir. 2021)

Whitman v. Am. Trucking Ass'ns, 531 U.S. 457 (2001)

Rumsfeld v. Padilla, 542 U.S. 426 (2004)

City of Tacoma, Washington v. FERC, 460 F.3d 53 (D.C. Cir. 2006)

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)

Transactive Corp. v. U.S., 91 F.3d 232 (D.C. Cir. 1996)

III. Whether FERC Acted Arbitrarily, Contravened the Federal Power Act, or Contravened the National Environmental Policy Act by Dismissing Compliance with Water Quality Standards as Irrelevant to its Licensing Decision.

Statutes

33 U.S.C. § 1341

16 U.S.C. § 797

16 U.S.C. § 803

42 U.S.C. § 4322

Regulations

40 C.F.R. § 1502

18 C.F.R. § 380.1

Representative Court Decisions

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989)

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, (1983)

American Rivers v. FERC, 895 F.3d 32 (D.C. Cir. 2018)

U.S. Dep't of Interior v. FERC, 952 F.2d 538 (D.C. Cir. 1992)

Bluewater Network v. EPA, 370 F.3d 1 (D.C. Cir. 2004)

Am. Lung Ass'n v. EPA, 134 F.3d 388 (D.C. Cir. 1998)

City of Tacoma, Washington v. FERC, 460 F.3d 53 (D.C. Cir. 2006)

IV. Whether FERC Acted Arbitrarily or Contravened the National Environmental Policy Act by Failing To Supplement Its Environmental Impact Statement for Conowingo Dam Despite Changed Circumstances and New Information Showing the Dam Does Not and Will Not Comply with Water Quality Standards.

Statutes

33 U.S.C. § 1341

16 U.S.C. § 797

16 U.S.C. § 803

42 U.S.C. § 4322

Regulations

40 C.F.R. § 1502

18 C.F.R. § 380.1

Representative Court Decisions
Norton v. S. Utah Wilderness All., 542 U.S. 55 (2004)

Marsh v. Oregon Nat. Res. Council, 490 U.S. 360 (1989)

Am. Rivers v. FERC, 895 F.3d 32 (D.C. Cir. 2018)

Friends of Cap. Crescent Trail v. Fed. Transit Admin., 877 F.3d 1051 (D.C. Cir. 2017)

Chem. Weapons Working Grp. v. U.S. Dep't of Def., 655 F. Supp. 2d 18 (D.D.C. 2009)

Calvert Cliffs Coordinating Committee v. US Atomic Energy Comm., 449 F.2d 1109 (D.C. Cir. 1971)

V. Whether FERC Acted Arbitrarily, Contravened the Federal Power Act, or Contravened the National Environmental Policy Act by Failing To Assess And Give Adequate Consideration To The Environmental Impacts of the Flow Regime It Established.

Statutes

42 U.S.C. § 4322

16 U.S.C. § 797

16 U.S.C. § 803

Representative Court Decisions

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)

Transactive Corp. v. U.S., 91 F.3d 232 (D.C. Cir. 1996)

Missouri Public Service Comm'n v. FERC, 337 F.3d 1066, 1070 (D.C. Cir. 2003)

Bluewater Network v. EPA, 370 F.3d 1 (D.C. Cir. 2004)

Am. Lung Ass'n v. EPA, 134 F.3d 388 (D.C. Cir. 1998)

SEC v. Chenery Corp., 332 U.S. 194 (1947)

VI. Whether FERC Acted Arbitrarily or Contravened the National Environmental Policy Act by Failing To Supplement Its Environmental Impact Statement for the Conowingo Dam Despite Changed Circumstances and New Information Regarding the Dam's Flows.

Statutes

42 U.S.C. § 4322

16 U.S.C. §§ 797

16 U.S.C. § 803

Regulations

40 C.F.R. § 1502.9

18 C.F.R. § 380.1

VII. Whether FERC Acted Arbitrarily, Contravened the Federal Power Act, or Contravened the National Environmental Policy Act by Failing To Assess And Give Adequate Consideration To Dredging To Combat the Impacts of Scour and the Conowingo Dam's Nutrient Pollution.

Statutes

42 U.S.C. § 4322

16 U.S.C. § 797

16 U.S.C. § 803

Regulations

40 C.F.R. § 1502.9

18 C.F.R. § 380.1

Representative Court Decisions

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)

Transactive Corp. v. U.S., 91 F.3d 232 (D.C. Cir. 1996)

VIII. Whether FERC Acted Arbitrarily or Contravened the National Environmental Policy Act by Failing To Supplement Its Environmental Impact Statement for the Conowingo Dam Despite Changed Circumstances and New Information Regarding Nutrient Pollution from the Dam, the Effectiveness of Dredging To Combat Scour Events and Nutrient Pollution, and the Cost of Dredging.

Statutes

42 U.S.C. § 4322.

16 U.S.C. § 797(e)

16 U.S.C. § 803(a)

Regulations

40 C.F.R. § 1502.9

18 C.F.R. § 380.1

IX. Whether FERC Acted Arbitrarily or Contravened the National Environmental Policy Act by Failing To Supplement Its Environmental Impact Statement for the Conowingo Dam Despite Changed Circumstances and New Information On Climate Change.

Statutes

42 U.S.C. § 4322

Regulations

40 C.F.R. § 1502.9

18 C.F.R. § 380.1

Representative Court Decisions

NRDC v. Morton, 458 F.2d 827 (D.C. Cir. 1972)

Norton v. S. Utah Wilderness All., 542 U.S. 55 (2004)

Marsh v. Oregon Natural Resources Council, 490 U.S. 360 (1989)

Friends of Cap. Crescent Trail v. Fed. Transit Admin., 877 F.3d 1051 (D.C. Cir. 2017)

Chem. Weapons Working Grp. V. U.S. Dep't of Def., 655 F. Supp. 2d 18 (D.D.C. 2009)

X. Whether FERC Acted Arbitrarily or Contravened the National Environmental Policy Act by Failing To Supplement Its Environmental Impact Statement for the Conowingo Dam Despite Changed Circumstances and New Information Regarding Battery Storage Technology.

Statutes

42 U.S.C. § 4322

Regulations

40 C.F.R. § 1502.9

18 C.F.R. § 380.1

Representative Court Decisions

Norton v. S. Utah Wilderness All., 542 U.S. 55 (2004)

Chem. Weapons Working Grp. v. U.S. Dep't of Def., 655 F. Supp. 2d 18 (D.D.C. 2009)

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)

XI. Whether FERC Acted Arbitrarily or Contravened the National Environmental Policy Act by Failing To Supplement Its Environmental Impact Statement for the Conowingo Dam Despite Changed Circumstances and New Information Regarding Financial Assurances.

Statutes

42 U.S.C. § 4322

Regulations

40 C.F.R. § 1502.9

18 C.F.R. § 380.1

Representative Court Decisions

Norton v. S. Utah Wilderness All., 542 U.S. 55 (2004)

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)

Chem. Weapons Working Grp. V. U.S. Dep't of Def., 655 F. Supp. 2d 18 (D.D.C. 2009)

STANDARD OF REVIEW

Because FERC is not the agency charged with administering the Clean Water Act, "the Court owes no deference to its interpretation of Section 401 or its conclusion regarding the states' waiver." *Hoopa Valley Tribe v. FERC*, 913 F.3d 1099, 1102 (D.C. Cir. 2019) (citing *Alcoa Power Generating, Inc. v. FERC*, 643

F.3d 963, 972 (D.C. Cir. 2011) ("Our review of the Commission's interpretation of Section 401 is *de novo.*")). The standard of review for EPA's "action, findings, and conclusions" is supplied by section 706(2) of the Administrative Procedure Act,5 U.S.C. § 706(2).

> To satisfy that standard, there must be "a rational connection between the facts found and the choice made" by the Commission." Missouri Public Service Comm'n v. FERC, 37 F.3d 1066, 1070 (D.C. Cir. 2003) (internal quotation marks and citations omitted). "FERC must articulate the critical facts upon which it relies, and when it finds it necessary to make predictions or extrapolations from the record, it must fully explain the assumptions it relied on to resolve unknowns and the public policies behind those assumptions. Similarly, when "the Commission balances competing interests in arriving at its decision, it must explain on the record the policies which guide it." Id. Finally, the Commission's factual findings are "conclusive" if, but only if, they are "supported by substantial evidence" in the record.

Missouri Public Service Comm'n v. FERC, 337 F.3d 1066, 1070 (D.C. Cir. 2003) (internal citations and quotation marks omitted).[2] Substantial evidence is record evidence which is expressly found to be: (A) reliable and probative for the purpose of supporting a finding and (B) superior to competing evidence with respect to a given finding. *See* Fed. Rules Evid. 702; *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590 (1993); *State Farm*, 463 U.S. at 43; *Burlington Truck v. U.S.*, 371

[2] *Missouri Public Service Comm'n* cites Natural Gas Act's judicial review provision, 15 U.S.C. § 717r(b), for the proposition that FERC's factual findings must be supported by substantial evidence, but Federal Power Act's judicial review provision contains the same requirement, 16 U.S.C. § 825l(b).

U.S. 156, 168 (1962). *See also Butte Cnty. v. Hogen*, 613 F.3d 190, 194 (D.C. Cir. 2010).

ARGUMENT

I. FERC'S ORDER APPROVING THE SETTLEMENT AND RELICENSING THE CONOWINGO DAM CONTRAVENES THE CLEAN WATER ACT AND IS ARBITRARY.

A. FERC's Action Is Unlawful.

Clean Water Act § 401(d) mandates that "any" water quality certification for a project "shall" become a condition on "any" license that FERC issues for that project. 33 U.S.C. § 1341(d). Thus, "[i]f a State issues a certification contingent on the applicant's satisfaction of various conditions, Section 401(d) requires the agency upon issuing the license to incorporate those conditions in the final license." *Alcoa*, 643 F.3d at 971. "This language is unequivocal." *American Rivers v. FERC*, 129 F.3d 99, 107 (2nd Cir. 1999). *See also PUD No. 1 of Jefferson Cnty. v. Wash. Dep't of Ecology*, 511 U.S. 700, 708 (1994) ("The limitations included in [a] certification become a condition on any federal license."). By failing to include Maryland's Certification for the Dam as a condition on the Dam's license, FERC violates the Clean Water Act.

FERC argues that, "[b]ecause MDE is waiving water quality certification in this proceeding, there are no certification conditions required to be included in the license." Order at ¶ 76. The settlement agreement, however, does not purport to

"waiv[e] water quality certification," *id.*; it states only that MDE "shall waive its rights to issue a CWA Section 401 certification." Settlement at 1-2 (emphasis added). Because Maryland undeniably issued a certification to Exelon in 2018 and has never withdrawn it, MDE's purported waiver of its "rights to issue" a certification three years later is irrelevant under § 401(d). The certification exists. Regardless of whether MDE waives its "rights to issue" a certification, therefore, § 401(d) – which provides that FERC "shall" include "any" certification for a project in that project's license – unequivocally requires FERC to include the Certification MDE has issued as a condition on Exelon's license. 33 U.S.C. § 1341(d). *See Alcoa*, 643 F.3d at 971; *American Rivers*, 129 F.3d at 107. *See United States v. Gonzales*, 520 U.S. 1, 5 (1997) ("Read naturally, the word 'any' has an expansive meaning, that is 'one or some indiscriminately of whatever kind.'") (quoting Webster's Third New International Dictionary 97 (1976)).

Moreover, MDE lacks statutory authority to "waive" a § 401 certification it issued three years ago. Section 401(a) provides that "if the State … fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived…" 33 U.S.C. § 1341(a) (emphasis added). In the next sentence, it provides "[n]o license or permit shall be granted until the certification required by this section has been obtained or has been waived as

provided in the preceding sentence." 33 U.S.C. § 1341(a) (emphasis added). Thus, a state can waive certification "only by refusing to respond to the request within a reasonable period of time." *State of N.C. v. FERC*, 112 F.3d 1173, 1183-1184 (D.C. Cir. 1997) (emphasis added). *See generally Dodd v. U.S.*, 545 U.S. 353, 358 (2005) (use of the word "if" "imposes a condition"). And § 401(a) "clearly provides that a Federal license or permit may not be granted 'until the certification required by [Section 401(a)(1)] has been obtained or has been waived' as a result of a state's "refus[al] to act on a request" for such in a timely manner." *State of N.C.*, 112 F.3d at 1185 (quoting 33 U.S.C. § 1341(a)(1)).

Here, far from "refus[ing]" to respond to Exelon's certification request, Maryland granted it. Moreover, Exelon and Maryland did not even enter into their settlement agreement until October 29, 2019 and, under the terms of the settlement, the purported waiver did not occur until March 19, 2021, almost four years after Exelon's request for a certification. For both reasons, any attempt by MDE to waive the Certification it issued in 2018 exceeds MDE's statutory authority. 33 U.S.C. § 1341(a). *State of N.C.*, 112 F.3d at 1183-1184. And, because MDE did not waive its Certification "as provided in" § 401(a), FERC exceeds its statutory authority and contravenes the Clean Water Act by granting a license for the Dam without including the Certification as a condition. If FERC does not wish to issue a license to Exelon based on the Certification Exelon obtained in 2018 and to include

that Certification as condition on Exelon's license as required by § 401(d), therefore, FERC has no authority to issue Exelon a license at all. 33 U.S.C. § 1341(a); *State of N.C.* 112 F.3d at 1183-1185.[3]

FERC's argument that no statutory provision "prohibit[s]" states from waiving certifications after granting them, Order at ¶ 73, misses the point. Section 401(a) gives states no authority to waive certifications except as it expressly provides – *i.e.* by refusing or failing to act on an application within one year. Thus, it provides no authority for states to waive certifications they have already granted. And because § 401(a) authorizes FERC to issue a license for a project only if a certification has been obtained or waived "as provided in" § 401(a), 33 U.S.C. § 1341(a), FERC exceeds its statutory authority by issuing a license for the Dam where, as here, a certification has not been waived as provided in § 401(a). "FERC is a creature of statute, and 'if there is no statute conferring authority, FERC has none.'" *Tesoro Alaska v. FERC*, 778 F.3d 1034, 1038 (D.C. Cir. 2015) (quoting *Atl. City Elec. Co. v. FERC*, 295 F.3d 1, 8 (D.C. Cir. 2002)).

FERC seeks support from *Alcoa* which, it claims, holds that a state may waive § 401 requirements "while its certification is under appeal." Order at ¶ 73 &

[3] FERC could issue a license to Exelon based on the Certification Exelon "obtained" from MDE in 2018 but, if it did so, FERC would need to include that Certification as condition in the license. 33 U.S.C. § 1341(d); *Alcoa*, 643 F.3d at 971.

n. 94. *Alcoa* merely notes that a waiver issue raised on appeal of a FERC decision on a § 401 certification might be moot if: (1) the certification was also challenged in state proceedings; (2) the state challenge was successful; and (3), in response to that decision, "the State decided to waive its certification rights rather than revise the certificate to accommodate this hypothetical ruling or the Commission ultimately declined to issue a license for reasons unrelated to the certificate." 643 F.3d at 969. *Alcoa* does not hold or even suggest that an existing certification can be waived where, as here, it has not been found defective in a state proceeding. Moreover, nothing in *Alcoa* supports the notion that FERC can issue a license based on a purported waiver that was not "in accordance with" § 401(a). 33 U.S.C. § 1341(a); *see State of N.C.*, 112 F.3d 1183-1184.

Although the text of §§ 401(a) and (d) make clear FERC cannot issue a license for the Dam without including the Certification as a condition, this fact is also confirmed by these provisions' context and purpose.

First, § 401(a)(3) "allows a state to revoke a prior certification only within a specified time limit and only pursuant to certain defined circumstances." *Keating v. FERC*, 927 F.2d 616, 623 (D.C. Cir. 1991) (emphasis added). Congress could easily have provided authority for states to waive existing certifications as well, but it chose not to do so. "It is a fundamental principle of statutory interpretation that 'absent provision[s] cannot be supplied by the courts.'" *Rotkiske v. Klemm*, 140 S.

Ct. 355, 360-61 (2019) (quoting A. Scalia & B. Garner, Reading Law: The Interpretation of Legal Texts 94 (2012)). When "Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." *Barnhart v. Sigmon Coal*, 534 U.S. 438, 452 (2002) (quoting Russello v. United States, 464 U.S. 16, 23 (1983)).

Indeed, allowing retroactive "waivers" of existing certifications would drain meaning from § 401(a)(3)'s limitations on states' authority to revoke existing certifications. If MDE's purported waiver of "its rights to issue" a certification really absolved FERC from including the existing Certification as a condition in Exelon's license as FERC assumes, Order at ¶ 76, it would be – in substance and effect – a revocation. *See* Black's Law Dictionary, 5th Ed. (1979) at 1188 (defining "revoke": "To annul or make void by recalling or taking back; to cancel, rescind, repeal or reverse"). MDE does not claim its purported waiver is a revocation, however, and MDE does not and could not possibly claim to have met § 401(a)(3)'s requirements for revoking an existing certification. If § 401(a)(3)'s limitations could be circumvented just by calling revocations by a different name *i.e.*, calling them "waivers" – those limitations would be meaningless. *See TRW, Inc. v. Andrews*, 534 U.S. 19, 21 (2001) (rejecting statutory interpretation that

rendered a provision "superfluous in all but the most unusual circumstances"); *Keating*, 919 F.2d at 623 ("[I]f a state could revoke a prior certification at any time and for any (or no) reason, however, section 401(a)(3) would be rendered meaningless. Obviously, such a result would make no sense.").

Second, §§ 401(a) and (d) give states only two options: (1) issue a certification that a project "will comply" with water quality standards and include in that certification any conditions necessary to assure compliance; or (2), waive certification altogether by failing or refusing to act on an application within one year. 33 U.S.C § 1341(a), (d). Congress's decision to provide only these two options confirms Congress did not intend to allow states a third option of exercising control over a project's license without certifying the project will comply with water quality standards. If MDE's purported waiver of its "rights to issue" a certification had the effect of revoking the Certification MDE did issue in 2018 and allowing FERC to exclude that Certification from Exelon's license as Exelon appears to believe, Order at ¶ 76, states could exercise control over licensing decisions without certifying compliance with water quality standards, let alone establishing the requirements necessary to assure such compliance. *See Keating*, 919 F.2d at 623. *See Sierra Club v. EPA*, 985 F.3d 1055, 1065 (D.C. Cir. 2021) (agency "may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion.") (quoting *Whitman v.*

Am. Trucking Ass'ns, 531 U.S. 457, 484 (2001)); *Rumsfeld v. Padilla*, 542 U.S. 426, 446 (2004) (rejecting interpretation that "would undermine, if not negate, the purpose of Congress").

Third, § 401(a) makes clear Congress not only intended states to establish procedures for public participation in state decisions on applications for § 401 certifications but "to *comply* with their public notice procedures." *City of Tacoma, Washington v. FERC*, 460 F.3d 53, 68 (D.C. Cir. 2006). It defeats the purpose of this requirement to allow a state to avoid the public participation requirements that would otherwise apply to withdrawing or replacing an existing certification just by calling the withdrawal a waiver of "rights to issue" the certification and calling the replacement certification a "settlement." *See Rumsfeld*, 542 U.S. at 446.

B. FERC's Action Is Arbitrary.

Even if it were not flatly unlawful for FERC to issue a license for the Dam without including the Certification as a condition, FERC's decision to do so here is arbitrary and capricious. FERC assumes a state's purported waiver of its "rights to issue" a certification in a settlement agreement can make a valid certification issued almost three years earlier disappear as if it had never existed.

Nowhere does FERC explain why it believes that MDE's purported waiver of rights to issue a certification is even relevant, given that MDE already has issued a certification. FERC does not say why it believes § 401(d), which expressly

requires FERC to include "any" certification for a project on "any" license for that project, allows it to ignore a certification for the Conowingo Dam that MDE has issued and never withdrawn. And if FERC believes that MDE's waiver of rights to issue a certification somehow turns back time and makes the Certification vanish as if it had never been issued, FERC does not even say so, let alone provide a rational basis for any such belief. *See State Farm*, 463 U.S. at 30 (agency must "articulate a satisfactory explanation for its action"); *Transactive Corp. v. U.S.*, 91 F.3d 232, 236 (D.C. Cir. 1996) ("In order to ensure that an agency's decision has not been arbitrary, we require the agency to have identified and explained the reasoned basis for its decision.").

Further, FERC does not explain why it believes MDE's waiver of rights to issue a certification – which took place almost three years after MDE had already granted Exelon's application and issued the Certification – gives it statutory authority to issue a license at all. The statute does not authorize states to "waive" existing certifications, and the statutory text and D.C. Circuit precedent could not be clearer that FERC has such authority to issue a license only if certification is waived "as provided in" § 401(a) – *i.e.* by a state's failure or refusal to act on an application within one year. 33 U.S.C. § 1341(a); *State of N.C.*, 112 F.3d at 1183-1184. FERC is well aware that: (1) MDE neither failed nor refused to act on Exelon's application, but granted it within one year; and (2), MDE's subsequent

"waive[r of] its rights to issue a CWA Section 401 certification," Settlement at 1-2, took place long after § 401(a)'s one-year deadline expired. FERC not only failed to explain how it nonetheless believes that this purported waiver gives it authority to issue a license, *see Transactive*, 91 F.3d at 236, but "entirely failed to consider an important aspect of the problem," the absence of statutory authority for states to waive existing certifications and the statutory limitation that § 401(a) places on FERC's licensing authority. *State Farm*, 463 U.S. at 43.

FERC does not explain why it believes Congress would establish carefully limited authority for states to revoke existing certifications in § 401(a)(3) if Congress intended to allow states to simply "waive" existing certifications out of existence without meeting any of those requirements. FERC also fails to explain why it chose both to treat MDE's purported waiver of its "rights to issue" a certification as if it were a revocation of the Certification MDE actually issued and ignore the fact that any such revocation would violate § 401(a)(3). FERC cannot simply ignore these problems; the D.C. Circuit has made plain that "[i]f the question regarding the state's section 401 certification is not the application of state water quality standards but compliance with the terms of section 401, then FERC must address it." *City of Tacoma*, 460 F.3d at 67.

More broadly, FERC fails to explain its acceptance of a scheme by which Exelon and MDE seek to circumvent the requirements of § 401 and replace a

lawful water quality certification with a settlement that does not purport to certify compliance with water quality standards. Rather than confronting the fact that its decision builds a bypass around key Clean Water Act requirements and explaining the choice it made, FERC relies on a wholly unexplained assumption that MDE's purported waiver allows this bypass to happen. Order at ¶¶ 74-76. *See State Farm*, 463 U.S. at 43; *Transactive*, 91 F.3d at 236.

Lastly, FERC dismisses the fact that the deal approved in its Order circumvents § 401's public participation requirements, shutting the public out of a process in which Congress intended the public to be included and shielding important state decisions from public scrutiny and judicial review. Order at ¶ 74.[4] Although FERC claims it has "no authority to consider these matters," Order at ¶ 74, the D.C. Circuit has held that that FERC has an obligation to assess whether states have complied with the public participation requirements they establish under § 401. *City of Tacoma*, 460 F.3d at 67. Thus, "when a state issues a water quality certification, FERC has an obligation to confirm, at least facially, that the state has complied with section 401(a)(1)'s public notice requirements." *Id.* at 68.

[4] Here, for example, MDE could have addressed Exelon's complaints about the Certification in the administrative process that it established under § 401(a). Had MDE decided to withdraw the Certification in that process, however, MDE would have had to provide a reasoned explanation for concluding that all the requirements it found necessary to assure compliance with water quality standards are not necessary. MDE's decision and its rationale for that decision would have been subject to review in Maryland state courts.

The same logic applies here, where FERC is choosing to treat MDE's waiver of rights to issue a certification as a revocation of the existing Certification. By refusing to even consider that MDE's purported waiver of its rights to issue a certification MDE had actually issued years ago is an end run around MDE's public notice requirements, FERC acts arbitrarily. *See State Farm*, 463 U.S. at 43; *Transactive*, 91 F.3d at 236.

II. FERC'S ORDER CONTRAVENES THE FEDERAL POWER ACT AND THE NATIONAL ENVIRONMENTAL POLICY ACT, AND IS ARBITRARY.

FERC's Order does not reflect reasoned agency decision-making and does not rest on the meaningful consideration of environmental impacts required by the Federal Power Act and NEPA.

The Federal Power Act provides that "[i]n deciding whether to issue any license" for a dam, FERC must "give equal consideration to the purpose[] of … protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality." 16 U.S.C. § 797(e). In addition, "all" licenses that FERC issues must be "best adapted to a comprehensive plan" for, among other things, "adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat)." *Id.* § 803(a)(1).

NEPA requires agencies to prepare an environmental impact statement ("EIS") prior to taking a "major Federal action[] significantly affecting the quality of the human environment." 42 U.S.C. § 4322(c). In an EIS, agencies must assess (1) the environmental impacts of the proposal; (2) the unavoidable adverse environmental effects; (3) the alternatives to the proposed action, including mitigation measures; (4) the relationship between the short-term uses of the environment and maintenance of long-term productivity; and (5) any irretrievable resource commitments involved if the proposal is implemented. *Id.; Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) (mitigation). Agencies "shall" supplement an EIS prior to taking the Federal action either if the agency "makes substantial changes to the proposed action that are relevant to environmental concerns" or if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9 (Council on Environmental Quality's NEPA regulations); 18 C.F.R. § 380.1 ("The Commission will comply with the regulations of the Council on Environmental Quality except where those regulations are inconsistent with the statutory requirements of the Commission.").

As shown below, FERC acted arbitrarily and violated the Federal Power Act and NEPA by failing to give adequate consideration to the environmental impacts

of its licensing decision in its final environmental impact statement ("FEIS") and in the Order itself.

A. FERC's Failure To Give Adequate Consideration To Compliance With Violation of Water Quality Standards Contravenes the Federal Power Act and the National Environmental Policy Act, and Is Arbitrary.

As required by Clean Water Act § 401(a), MDE's Certification sets forth the requirements to assure the Conowingo Dam "will comply" with water quality standards. 33 U.S.C. § 1341(a). It certifies that "the Project's operations and discharge into navigable waters will comply with applicable effluent limitations, other limitations, and water quality standards and requirements issued or approved under Sections 301, 302, 303, 306, and 307 of the Clean Water Act or applicable State Law, provided that Licensee complies with all of the provisions, requirements, and conditions in this Certification." Certification at 7 (emphasis added). These are requirements MDE found "necessary" to assure the Dam's compliance with water quality standards, 42 U.S.C. § 1341(d). The license that FERC has issued to Exelon, however, contains none of them.

Remarkably, FERC does not claim the requirements in the Certification are unnecessary to meeting water quality standards or that the Dam will comply with water quality standards even in their absence. Instead, FERC insists that whether the Dam complies with water quality standards is irrelevant to its licensing decision. In FERC's view, "certification is waived" and, therefore, "the licensee is

not compelled to construct, operate, or maintain a hydroelectric project in a manner consistent with state water quality standards unless the Commission includes such a requirement in the license." Order at ¶ 76. FERC did not include such a requirement in the license. Instead, FERC states it "conducted its own analysis of the water quality impacts of the project as proposed and is requiring those measures we deem necessary to protect aquatic resources." *Id.* According to FERC, "[n]o more is required." *Id.*

Even if issuing Exelon a license without including the Certification as a condition did not violate the Clean Water Act, *but see supra* at 27-34, FERC's dismissal of compliance with water quality standards as irrelevant is arbitrary. Whether a dam will or will not comply with water quality standards is, at a minimum, an "important aspect of the problem" FERC must consider in deciding whether to grant that dam a license. *State Farm*, 463 U.S. at 43. *See American Rivers v. FERC*, 895 F.3d 32, 51-54 (D.C. Cir. 2018) (emphasizing importance of compliance with water quality standards in decision to relicense a dam). By failing entirely to consider this issue, FERC acted arbitrarily. *Id.* (agency action is arbitrary where it "entirely failed to consider an important aspect of the problem"); *League of Women Voters of United States v. Newby*, 838 F.3d 1, 10 (D.C. Cir. 2016) (agency acted arbitrarily in finding statutory criterion irrelevant).

The arbitrariness of FERC's decision is in no way diminished by FERC's assertion that, beyond its "own analysis of the water quality impacts," "[n]o more is required," Order at ¶ 76. If FERC believes the Dam will comply with water quality standards even without the requirements in the Certification, FERC's Order leaves the public and a reviewing court to guess at why FERC so believes. Alternatively, if FERC does not believe the Dam will comply with water quality standards or does not care whether it will comply, FERC's Order leaves the public and a reviewing court to guess at why FERC regards compliance with water quality standards as irrelevant. "With its delicate balance of thorough record scrutiny and deference to agency expertise, judicial review can occur only when agencies explain their decisions with precision, for '[i]t will not do for a court to be compelled to guess at the theory underlying the agency's action…'" *Bluewater Network v. EPA*, 370 F.3d 1, 21 (D.C. Cir. 2004) (quoting *Am. Lung Ass'n v. EPA*, 134 F.3d 388, 392 (D.C. Cir. 1998) (quoting *SEC v. Chenery Corp.*, 332 U.S. 194, 196–97 (1947))).

FERC's dismissal of compliance with water quality standards also contravenes the Federal Power Act. Sections 4(e) and 10(a) of this statute, 16 U.S.C. §§ 797(e), 803(a), both require FERC to "consider environmental issues when deciding whether to issue hydropower licenses." *U.S. Dep't of Interior v. FERC*, 952 F.2d 538, 543 (D.C. Cir. 1992). Congress added the requirements for equal

consideration of environmental impacts into § 4(e) specifically to increase FERC's "sensitivity to environmental concerns." *Id.* at 544 (citing H.R. Rep. No. 507, 99th Cong., 2d Sess. 21–22 (1986) ("It is intended that the Commission give significant attention to, and demonstrate a high level of concern for all environmental aspects of hydropower development...."); H.R. Conf. Rep. No. 934, 99th Cong., 2d Sess. 21 (1986) ("The amendments expressly identify fish and wildlife protection, mitigation, and enhancement, recreational opportunities, and energy conservation as nondevelopmental values that must be adequately considered by FERC when it decides whether and under what condition to issue a hydroelectric license for a project.") (emphasis added)). Although the equal consideration language in § 4(e) does not require FERC to give environmental factors "preemptive force," *id.* at 545, FERC's arbitrary dismissal of compliance with water quality standards as irrelevant to its licensing decision, Order at ¶ 76, falls far short of the adequate consideration of environmental issues that the Federal Power Act requires.

That same failure also violates NEPA. NEPA "compel[s] federal agencies to take a hard and honest look at the environmental consequences of their decisions." *American Rivers*, 895 F.3d 49. FERC's dismissal of compliance with water quality standards as irrelevant is the antithesis of a "hard and honest look at the environmental consequences" of its decisions. *See Calvert Cliffs Coordinating Committee v. US Atomic Energy Comm.*, 449 F.2d 1109 (D.C. Cir. 1971). To

ensure that the balancing analysis is carried out and given full effect, NEPA § 102(2)(C), 42 U.S.C.S. § 4321 *et seq.*, requires that responsible officials of all agencies prepare a "detailed statement" covering the impact of particular actions on the environment, the environmental costs which might be avoided, and alternative measures which might alter the cost-benefit equation. Beyond the "detailed statement," § 102(2)(D) requires all agencies specifically to study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources. Moreover, by compelling a formal "detailed statement" and a description of alternatives, NEPA provides evidence that the mandated decision making process has in fact taken place and, most importantly, allows those removed from the initial process to evaluate and balance the factors on their own.

Further, the NEPA regulations of the Council on Environmental Quality ("CEQ"), with which FERC must comply, provide that agencies "[s]hall prepare supplements to either draft or final environmental impact statements if … [t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9; 18 C.F.R. § 380.1. Here, "significant new circumstances or information" emerged after FERC issued its FEIS in 2015. First, MDE issued the Certification, which sets out specific requirements that are necessary to the Dam's compliance with Water

Quality Standards—including requirements on Chlorophyll-A and PCBs. Certification at 13-27; 33 U.S.C. § 1341(d) (certifications must include limitations "necessary" to assure compliance with water quality standards). *See also* Certification at 7 (certifying Dam will comply with water quality standards "provided that" it satisfies "all" the requirements in the Certification). Second, Maryland listed the Susquehanna River as "impaired" by the Dam. Final Impairment Report at 38, 134. *See also* EPA Approval Letter.

MDE's Certification and the listing of the River as impaired by the Dam are "significant new circumstances or information," 40 C.F.R. § 1502.9, because they show that the Dam is out of compliance with water quality standards now and that it will not comply with water quality standards without meeting the requirements in the Certification, including the requirements on chlorophyll-A and PCBs. For example, MDE's Certification identified the need for additional analysis on whether corrective action is required at the Dam to address elevated PCB levels in fish tissue in the Reservoir and downstream. Certification at 19. After the FEIS failed to consider the effects of PCBs, EPA itself emphasized that FERC should consider PCB contamination in the future. EIS at H-17. FERC must supplement the FEIS to assess and adequately consider the Dam's effects on PCB pollution and chlorophyll-A. At a minimum, CEQ's regulations require FERC to supplement its FEIS to take a "hard and honest look" at both the environmental consequences of

an action, *see American Rivers*, 895 F.3d at 49*; NRDC v. Morton*, 458 F.2d 827, 838 (D.C. Cir. 1972), and the "new information to assess the need for supplementation," *Norton v. S. Utah Wilderness All.*, 542 U.S. 55, 56 (2004) (quoting *Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 385 (1989)).

B. FERC's Failure To Assess and Adequately Consider The Settlement Flow Regime Contravenes the Federal Power Act and the National Environmental Policy Act, and Is Arbitrary.

1. FERC unlawfully and arbitrarily relies on the conclusion that the new flow regime is "generally" better than current operation.

FERC attempts to dismiss the inadequacy of the Settlement's new flow regime by saying that, although the new flow regime "in most months is lower than the requirements . . . of the MDE certification," "it is generally higher than the current [now previous] license requirements." Order at ¶ 49, n. 37. NEPA and the Federal Power Act require FERC to assess and adequately consider the new flow regime's environmental impacts—not whether the new flow regime is less-bad than the last one. *See* 42 U.S.C. § 4322 (requiring "a detailed statement . . . on [] the environmental impact of the proposed action,") (emphasis added); 16 U.S.C. §§ 797(e) ("In deciding whether to issue any license under this subchapter for any project, the Commission . . . shall give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of

environmental quality."), 803(a) ("All licenses . . . "shall," among other things, "be best adapted to a comprehensive plan . . . for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses . . .").

Moreover, the new flow regime is worse in some months than even previously licensed operation. EIS at 191 (requiring previous minimum of 5,000 cfs from August 1 through September 14); Order at ¶ 121 (1,000 cfs less), 83-84, Article 407 (requiring new minimum of 4,000 cfs). As detailed in the Certification and the Final Impairment Report, previously licensed operation has been devastating for the natural resources of the Lower Susquehanna River and the Chesapeake Bay. Certification at 12; Final Impairment Report at 38. By licensing a flow regime that is "generally higher" than previous operation, FERC "entirely failed to consider an important aspect of the problem"—that previously licensed operation was inadequate to protect aquatic organisms in the Lower Susquehanna River and the Bay—and has acted arbitrarily. *State Farm*, 463 U.S. at 43. If FERC believes that the lower flows it ultimately selected for this time period will not continue to impair the Lower Susquehanna River and harm the Bay, it needs to make that claim and explain it. And, if FERC believes that the lower flows will continue to impair the Lower Susquehanna and harm the Bay, it needs to say why it selected that regime anyway. Instead, FERC offers no explanation for selecting a regime

that is worse in some months than previously licensed operation. *See State Farm*, 463 U.S. at 43 (agency must "articulate a satisfactory explanation for its action"); *Transactive*, 91 F.3d at 236 ("In order to ensure that an agency's decision has not been arbitrary, we require the agency to have identified and explained the reasoned basis for its decision."). "With its delicate balance of thorough record scrutiny and deference to agency expertise, judicial review can occur only when agencies explain their decisions with precision, for '[i]t will not do for a court to be compelled to guess at the theory underlying the agency's action…'" *Bluewater Network v. EPA*, 370 F.3d 1, 21 (D.C. Cir. 2004) (quoting *Am. Lung Ass'n v. EPA*, 134 F.3d 388, 392 (D.C. Cir. 1998) (quoting *SEC v. Chenery Corp.*, 332 U.S. 194, 196–97 (1947))).

2. FERC unlawfully and arbitrarily relies on a comparison of the new flow regime to the alternatives considered in the EIS.

In addition to trying to rely on an irrelevant comparison to the existing flow regime, FERC seeks to rely on a similarly irrelevant comparison to the flow regimes considered in the EIS, saying that the new flow regime "generally provides for higher flows than Commission staff's recommendation, and more closely mimics the TNC Flow Regime by limiting maximum generation and modifying ramping rates." Order at ¶ 121. This fails for two reasons.

First, FERC cannot satisfy NEPA's and the Federal Power Act's requirements to assess and adequately consider the environmental impacts of the new flow

regime by comparing the flows of the new flow regime to the flows alternative flow regimes considered in the EIS. Flows themselves are not environmental impacts, and different combinations of flows are unique in their environmental impacts. Significantly, FERC itself recognizes that selection of a flow regime that is different than the one it evaluated in the EIS requires additional analysis:

> [S]everal combinations of minimum and maximum flows may improve habitat for some species and life stages, but those flow combinations are not consistent among the evaluation species. Certain flows may improve habitat for some species and life stages, while those same flows would reduce habitat for other species and life stages. Selection of an alternative flow regime would require balancing among the several target species and life stages . . .

EIS at 152 (emphasis added). Here, however, FERC has selected a flow regime that is different than any of the three flow regimes considered by the EIS but has not conducted the analysis of the impacts of this new flow regime that FERC identified as necessary. Thus, even by its own lights, FERC has not satisfied either the Federal Power Act's or NEPA's requirement to assess and adequately consider the environmental impacts of the new flow regime by simply comparing the flows in the new flow regime to the flows in other flow regimes that it considered in the EIS. 42 U.S.C. § 4322; 16 U.S.C. §§ 797(e), 803(a). Instead, NEPA and the Federal Power Act require FERC to assess and adequately consider the environmental impacts of the flow regime FERC selected. 42 U.S.C. § 4322; 16 U.S.C. §§ 797(e), 803(a). And, by "entirely fail[ing] to consider an important

aspect of the problem"—the environmental impacts of the new flow regime—FERC has acted arbitrarily. *State Farm,* 463 U.S. at 43.

Second, even if flow regimes were not unique in their environmental impacts and FERC could extrapolate environmental impacts from comparing the flows of different flow regimes—which FERC has also arbitrarily failed to explain, *Missouri Public Service Comm'n v. FERC*, 37 F.3d 1066, 1070 (D.C. Cir. 2003) ("when it finds it necessary to make predictions or extrapolations from the record, it must fully explain the assumptions it relied on to resolve unknowns and the public policies behind those assumptions."), the flow regime FERC selected is in some months worse than any of the alternatives considered in the EIS. As FERC admits, "from August 1 through September 14 [minimum] flows would be 1,000 cfs less" than Exelon's proposed alternative. Order at ¶ 121. That reduction amounts to 20% lower minimum flows, from 5,000 cfs to only 4,000 cfs, *id.*, during a time when Herring and Shad are migrating downstream and need sufficient water flow to make it past the Dam, *see id.* at 1-22, App. D to Att. 1. Because FERC has failed to assess the environmental impacts of a minimum flow from August 1 through September 14 as low as the flow FERC now licenses, FERC has not satisfied NEPA's and the Federal Power Act's requirements to assess and adequately consider the environmental impacts of the new flow regime. 42 U.S.C. § 4322; 16 U.S.C. §§ 797(e), 803(a). And, by "entirely fail[ing] to

consider an important aspect of the problem"—the environmental impacts of the new regime's lower flows—FERC has acted arbitrarily. *State Farm*, 463 U.S. at 43.

Moreover, Exelon's Application supports that the environmental impacts of the 20% reduction in minimum flows allowed by FERC's chosen flow regime in August and September will be significant. Exelon Application, Instream Flow Habitat Assessment Below Conowingo Dam, Table 5.1-2. Exelon compares the maximum weighted usable area ("MWUA")—an index of habitat—at 5,000 cfs and at 3,500 cfs. *Id*.; Order at ¶ 121 (requiring minimum flow of 4,000 cfs). For example, for spawning Shad—a key species present in August and September—Exelon estimates that decreasing the minimum flow from 5,000 cfs to 3,500 cfs would reduce habitat by 35%—from 26.3% MWUA to 17.2%. Exelon Application, Instream Flow Habitat Assessment Below Conowingo Dam, Table 5.1-2. For Striped Bass fry, Exelon estimates that decreasing the minimum flow from 5,000 cfs to 3,500 cfs would reduce habitat by 28%—from 18.4% MWUA to 13.2%. *Id.* By licensing a flow regime on the basis that it "generally provides for higher flows," FERC "entirely failed to consider an important aspect of the problem," the environmental impacts of the lower flows the chosen regime allows. *State Farm*, 463 U.S. at 43.

Indeed, FERC effectively admits that it has failed to satisfy NEPA's and the Federal Power Act's requirements to assess and adequately consider the environmental impacts of the Settlement's new flow regime, 42 U.S.C. § 4322; 16 U.S.C. §§ 797(e), 803(a). FERC requires Exelon to develop and implement a waterfowl nesting protection plan to "assess[] the impact, if any, of the new flow regime . . . on waterfowl nesting success." Order at ¶ 58, n. 55 (emphasis added). The plan further requires provisions to "verify specific-project related effects," and "which species . . . are affected by the project, if any." *Id.* at 95, Article 422 (emphasis added). FERC's admission that it does not know what the "specific project-related effects" of the new flow regime will be, or even "if any" species will be affected, Order at ¶ 58, n. 55, 95, demonstrate that FERC has failed to satisfy NEPA's and the Federal Power Act's requirements to "assess" and adequately consider the environmental impacts of the flow regime. 42 U.S.C. § 4322(c) ("assess [] the environmental impacts); 16 U.S.C. §§ 797(e) ("equal consideration"), 803(a).

3. FERC unlawfully and arbitrarily relies on the false conclusion that the new flow regime meets TNC's recommended minimum habitat index.

FERC premises its acceptance of the new flow regime on the incorrect conclusion that the new flow regime—and the staff's recommended flow regime for that matter—maintain The Nature Conservancy's recommended 70% of habitat:

> The MDE Settlement flow proposal would increase habitat availability downstream of the project for one month longer than staff's recommended flow in the final EIS, meeting or exceeding the TNC's recommended 70% of the maximum weighted usable area [MWUA] for key species from April 1 through November 30, excluding June 16 through June 30.

Order at ¶ 125. However, the EIS shows that neither the Settlement's nor the staff's minimum flows maintain at least 70% of habitat for key species' life stages in any month. *See State Farm*, 463 U.S. at 43 ("arbitrary and capricious if the agency has . . . offered an explanation for its decision that runs counter to the evidence before the agency"); *Missouri Pub. Serv. Comm'n. v. FERC*, 337 F.3d at 1075 ("[r]eliance on facts that an agency knows are false at the time it relies on them is the essence of arbitrary and capricious decisionmaking.").

The Nature Conservancy alerted FERC of this error in its comments on the Draft EIS. The Nature Conservancy, "Comments on Draft Multi-Project Environmental Impact Statement For Hydropower Licenses, Susquehanna River Hydroelectric Projects," eLibrary no. 20140929-5354 (Sept. 29, 2014). In Table 3-21 of the Draft EIS, FERC included a range of flows claiming to "provid[e] 70 percent of the MWUA [habitat index] for fish species and life stages likely to occur during each month." However, the listed flow ranges erroneously included the minimum flow required to maintain 70% of habitat for just one species rather than all species. For example, if in August and September, juvenile Shad require a minimum flow of 2,000 cfs, juvenile Striped Bass require 7,961 cfs, and adult

Striped Bass require 21,450 cfs, the minimum flow to maintain 70% of habitat for all species' life stages would be 21,450 cfs, but the Draft EIS erroneously reported only 2,000 cfs—the minimum to maintain 70% of habitat for just one species' life stage. DEIS at 144, Table 3-21. Alerted of this significant error, FERC "revisited" their analysis in the EIS and "revised" the table "to provide more details on the range of flows that would provide 70 percent" of habitat. EIS at H-15.

Rather than fixing the error, however, FERC repeats it by finding that the Settlement flow and the staff-recommended flow meet the minimum 70% of habitat. Order at ¶ 125. FERC's updated Table 3-21, now Table 3-22 of the EIS, shows that neither the Settlement's minimum flows nor the staff-recommended minimum flows will maintain 70% of habitat for key species' life stages in any month. From December through March, the only months FERC recognizes neither flow regime would maintain 70% of habitat, the Settlement requires minimum flows from 4,000-18,200 cfs. However, adult striped bass—the only key species FERC considers during these months—require a minimum flow of 21,450 cfs to maintain 70% of habitat. In April, FERC claims the Settlement's 18,200 cfs flow maintains 70% of minimum habitat and the staff recommended flow of 10,000 cfs does not. Although the Settlement's flows maintain 70% of habitat for spawning and adult Shad and the staff recommended flow regime does not, neither regime maintains 70% of habitat for spawning, fry, or adult Striped Bass (requiring 20,450

cfs, 22,977 cfs, and 21,450 cfs, respectively). EIS at Table 3-22. From June 15 through June 30, as admitted by FERC, neither the Settlement's flow regime nor the staff recommended flow regime maintain 70% of habitat for any key species' life stages. Making its error very apparent, FERC states "[t]he 7,500-cfs minimum flow from June 16 through June 30 is less than the 7,744 cfs necessary to achieve 70%" of habitat. Order at ¶ 125 n. 171. Although Shad fry require 7,744 cfs to maintain 70% of habitat—which neither flow regime meets—every other key species' life stage requires even more—up to 22,977 cfs for Striped Bass fry and 14,472 for spawning Shad. EIS at Table 3-22. The Settlement's minimum flow at this time is only one half and one third of the minimum flow needed to support Shad and Striped Bass in all life stages. In every month, each flow regime's minimum flow may maintain 70% of habitat for some or none (December through March and June 15 through June 30) of the key species' life stages but does not maintain 70% of habitat for most or even all key species' life stages.

FERC's conclusory statement "runs counter to the evidence before the agency" and is arbitrary. *See State Farm*, 463 U.S. at 43 ("arbitrary and capricious if the agency has . . . offered an explanation for its decision that runs counter to the evidence before the agency"). "Reliance on facts that an agency knows are false at the time it relies on them is the essence of arbitrary and capricious decisionmaking." *Missouri Pub. Serv. Comm'n. v. FERC*, 337 F.3d at 1075.

Moreover, the new flow regime is worse in some months than the staff-recommended alternative, which FERC staff found "would adequately protect and enhance environmental resources" and "would be worth the cost." EIS at xliii. If FERC believes that the lower flows it ultimately selected for this time period will also "adequately protect and enhance environmental resources," it needs to make that claim and explain it. If FERC believes that the new regime will not adequately protect and enhance environmental resources, it needs to say why it selected that regime anyway. *See State Farm Mut.*, 463 U.S. at 43 (agency must "articulate a satisfactory explanation for its action"); *Transactive*, 91 F.3d at 236 (D.C. Cir. 1996) ("In order to ensure that an agency's decision has not been arbitrary, we require the agency to have identified and explained the reasoned basis for its decision."); *Bluewater Network v. EPA*, 370 F.3d 1, 21 (D.C. Cir. 2004) ("judicial review can occur only when agencies explain their decisions with precision"). By licensing a flow regime that "generally provides for higher flows than Commission staff's recommendation," FERC "entirely failed to consider an important aspect of the problem"—the environmental impacts of lower flows—and has acted arbitrarily. Order at ¶ 121; *State Farm*, 463 U.S. at 43.

4. FERC unlawfully fails to adequately and equally consider the environmental impacts of the flow regimes.

Separately, FERC dismisses the more protective TNC alternative flow regime and chooses the new flow regime because it claims that while "both flow regimes

would provide additional benefits for aquatic resources," the Settlement's flow regime "has less of an impact on generation." Order at ¶ 126. NEPA and the Federal Power Act do not allow FERC to simply choose the alternative that has "less of an impact on generation," Order at ¶ 126, but instead require FERC to adequately and "equal[ly]" consider the environmental impacts and to select the alternative "best adapted" to all uses. 16 U.S.C. §§ 797(e), 803(a)(1); 42 U.S.C. § 4322(c). By failing assess and adequately consider the environmental impacts to compare the "benefits" between the new flow regime and the TNC flow regime and acknowledge the benefits of the TNC regime are significantly greater, let alone provide a reasoned basis for assuming these greater benefits are outweighed by "less of an impact on generation," FERC has failed to satisfy NEPA and the Federal Power Act.

Moreover, the TNC alternative flow regime offers significant benefits over the new flow regime. While the new flow regime fails to maintain 70% habitat for key species' life stages in any month, the TNC proposal would maintain 70% habitat for some key species' life stages and all key species' life stages in April and May.

5. FERC unlawfully and arbitrarily fails to supplement the EIS.

The above-described failures also violate NEPA's requirement that FERC supplement an EIS "if . . . [FERC] makes substantial changes to the proposed action that are relevant to environmental concerns." 40 C.F.R. § 1502.9(d)(1)(i).

Here, the Settlement's flow regime—far worse than the Certification required and worse in some months than FERC staff's recommendation, any of the alternatives considered in the EIS, and even previously licensed operation—is a "substantial change[] to the proposed action that [is] relevant to environmental concerns." 40 C.F.R. § 1502.9; 18 C.F.R. § 380.1. FERC is required to supplement the EIS to assess and adequately consider the environmental impacts of the new flow regime.

The need to supplement is especially apparent when the new flow regime is considered in combination with other changed circumstances and new information, such as MDE's Certification and the Final Impairment Report which show that the previously licensed operation was wholly inadequate to protect the Lower Susquehanna River and the Chesapeake Bay. Certification at 12; Final Impairment Report at 38. FERC cannot license a new flow regime that is far worse than MDE's Certification shows is required and is worse in some months than FERC staff's recommendation, any of the alternatives considered in the EIS, and even previously licensed operation without supplementing the EIS to assess and adequately consider the environmental impacts of the new flow regime. 42 U.S.C. § 4322; 16 U.S.C. §§ 797(e), 803(a).

C. FERC's Failure To Assess And Give Adequate Consideration To Dredging To Combat the Impacts of Scour Contravenes the Federal Power Act and the National Environmental Policy Act and Is Arbitrary.

FERC rests its refusal to require dredging or other measures to control sediment and nutrient loading on conclusory claims that "the benefits are short-lived and not worth the expense." Order at ¶ 146. FERC fails entirely to explain that claim. Without assessing and adequately considering the long-term benefits of dredging and the damage from scour events, 42 U.S.C. § 4322; 16 U.S.C. §§ 797(e), 803(a), FERC cannot begin to know what the benefits might be "worth." *See State Farm*, 463 U.S. at 43; *Transactive*, 91 F.3d at 236.

FERC's assumption on cost has also been undermined by changed circumstances and new evidence that dredging is both substantially more effective than FERC acknowledges and substantially less expensive. First, directly refuting FERC's claim that the benefits of dredging would be "short lived," HarborRock, a dredging company with an established track record, has provided a report showing that it can remove enough sediment to achieve the nutrient reductions identified as necessary in the Watershed Implementation Plan, 6 million pounds of nitrogen per year and 260,000 pounds of phosphorous per year. Waterkeepers Comments, Ex. M at 7. *Cf.* Watershed Implementation Plan at 11. Second, refuting FERC's assumption that dredging would cost $267 million per year, EIS at 80, HarborRock reports that it could accomplish the necessary nutrient reductions for $41 million

per year. *Id.* This information showing that dredging is both more effective and less expensive than FERC assumed is a significant change in circumstance and new information "relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9; 18 C.F.R. § 380.1. NEPA requires FERC to supplement its EIS on the basis of this change in circumstance and new information. 40 C.F.R. § 1502.9; 18 C.F.R. § 380.1.

In addition to claiming "the benefits are short-lived," FERC also rests its refusal to require dredging on the claim that this pollution "is a watershed-wide issue" that "would occur in the long term whether or not Conowingo Dam was in place." Order at ¶ 146. Each of FERC's argument fails for four reasons.

First, FERC has "entirely failed to consider an important aspect of the problem"—that a sediment and nutrient loading solution requires watershed-wide reductions and reductions from behind the Dam—and has acted arbitrarily. *State Farm*, 463 U.S. at 43.

As explained by MDE's Certification, because "no efforts have been undertaken over the life of the Project, such as routine dredging, to maintain any trapping function," "the Reservoir is now full." Certification at 12. "As a result, . . . during large storm events, significant amounts of trapped sediments and nutrients are scoured from [] behind the Dam and discharged downstream." Certification at 12. Overall, sediment and nutrient scouring "has altered the nature, timing, and

delivery method of these materials with adverse consequences for the Lower River and the Bay." Certification at 12. Storm events deliver much greater quantities of sediment and nutrients through scouring than would occur without the Dam during the same storm events. *C.f.* Comments of Lower Susquehanna River Association, Waterkeepers Chesapeake, and Earthjustice on Certification Application # 17-WQC-02 (Sept. 11, 2017); CBF Comments.

The buildup of sediments and nutrients behind the Dam "poses a major threat to Chesapeake Bay restoration efforts," Final Impairment Report at 38, and, as the U.S. Geological Survey stated in a 2012 report:

> [E]fforts to reduce nutrient and sediment inputs to the Chesapeake Bay will need to include consideration of changes in the trapping of sediment entering, and scouring of sediment in, the reservoirs along with the management actions implemented upstream in the watershed.

Robert M. Hirsch, *Flux of Nitrogen, Phosphorus, and Suspended Sediment from the Susquehanna River Basin to the Chesapeake Bay during Tropical Storm Lee, September 2011, as an Indicator of the Effects on Reservoir Sedimentation on Water Quality* (2012) (hereinafter "USGS Report"). And, as explained in the Watershed Implementation Plan ("WIP"), "even after full Phase II WIP implementation:

> Bay jurisdictions need to achieve an additional watershed-wide reduction of 6 million pounds of nitrogen per year and 0.26 million pounds of phosphorus per year. This <u>additional reduction</u> is <u>needed to mitigate the increased pollution from Conowingo Dam infill</u> and meet downstream WQS.

Watershed Implementation Plan at 11 (emphasis added). And, new information shows that scour events are only going to get more frequent and worse, doing permanent damage to the Lower Susquehanna and the Bay, *see supra* Background Section V; *infra* Section II.D.

Second, FERC ignores the long-term damage from scouring of sediment and nutrients trapped behind the Dam, including by assuming that sediment and nutrient loading average out over the "long-term." Whether sediment loads are reduced next week will not matter to the grasses, oyster beds, and other marine life "buried" by sediment or suffocated by a nutrient-fueled algal bloom from a scour event this week. EIS at 76 (summarizing comments), 137 ("high nutrient loading . . . result[s] in hypoxia (the depletion of [dissolved oxygen] in the water column"). Avoiding even one scouring event can have serious, long-term benefits to the Lower Susquehanna River and the Bay.

Third, FERC ignores that dredging can (1) restore and improve the trapping capacity of the Dam and lower the average sediment and nutrient loading over time; and (2) minimize the scouring by reducing trapped sediment and nutrients. As Maryland and FERC have long recognized, dredging can both lower sediment and nutrient levels below the reach of scour—reducing the harm from scour events—and restore and improve the trapping capacity of the Dam—reducing sediment and nutrient loading and associated harms downstream over the long-

term. Certification at 12; EIS at 80. FERC itself explains that scouring reduces the trapped sediment and nutrients from behind the Dam, restores or improves trapping capacity, and thus reduces sediment and nutrient loads flowing passed the Dam. Order at ¶ 143. That is precisely what dredging accomplishes yet, without the downstream impacts associated with scour events. FERC's failure to consider or even recognize this fact is a failure to consider an important aspect of the problem. *State Farm*, 463 U.S. at 43.

Finally, FERC arbitrarily "entirely fails" to consider the contribution of trapped and scoured PCB- and nutrient-laden sediment on PCB and chlorophyll-A pollution in the Reservoir and downstream. *Id.* After the EIS failed to consider the effects of PCBs, EPA itself emphasized that FERC should consider PCB contamination in the future. EIS at H-17. And, MDE's certification found PCB and chlorophyll-A requirements were necessary to ensure compliance with water quality standards. Certification at 19. FERC must supplement the FEIS to assess and adequately consider the Dam's effects on PCB and chlorophyll-A pollution. 40 C.F.R. § 1502.9; 18 C.F.R. § 380.1.

D. FERC Failed To Supplement The EIS Despite Changed Circumstances and New Information On Climate Change.

The NEPA regulations of the Council on Environmental Quality ("CEQ"), with which FERC must comply, provide that agencies "[s]hall prepare supplements to either draft or final environmental impact statements if … [t]here are significant

new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(d); 18 C.F.R. § 380.1; *see also* 42 U.S.C. § 4322. Agencies must take a "hard and honest look" at both environmental consequences of an action, *see American Rivers*, 895 F.3d at 49*; NRDC v. Morton*, 458 F.2d 827, 838 (D.C. Cir. 1972), and "at new information to assess the need for supplementation," *Norton v. S. Utah Wilderness All.*, 542 U.S. 55, 56 (2004) (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 385 (1989)). "In the context of reviewing a [federal agency's] decision not to supplement an EIS [environmental impact statement]," the reviewing court cannot defer to the agency's determination without:

> carefully reviewing the record and satisfying themselves that the agency has made a reasoned decision based on its evaluation of the significance—or lack of significance—of the new information. A contrary approach would not simply render judicial review generally meaningless, but would be contrary to the demand that courts ensure that agency decisions are founded on a reasoned evaluation of the relevant factors.

See *Marsh*, 490 U.S. at 378 (internal quotations omitted); see also *Friends of Cap. Crescent Trail v. Fed. Transit Admin.*, 877 F.3d 1051, 1059 (D.C. Cir. 2017) (citing *Marsh*, 490 U.S. at 378).

The District Court for D.C. has interpreted precedent as requiring the reviewing court to "[f]irst, . . . evaluate whether the agency took a hard look at the proffered new information," and "[n]ext, if the agency did take a hard look, the court must then determine whether the agency's decision not to prepare a supplemental EIS

was arbitrary or capricious." *Chem. Weapons Working Grp. v. U.S. Dep't of Def.*, 655 F. Supp. 2d 18, 35 (D.D.C. 2009) (internal quotations omitted).

Here, "significant new circumstances or information" emerged after FERC issued the EIS in 2015, over six years ago. New information shows that climate change has already resulted in increased rainfall, flow, and nutrient and sediment loads to the Chesapeake Bay—and climate change impacts are expected to worsen in coming decades. Chesapeake Bay Program, "Hot, Wet, and Crowded: Phase 6 Climate Change Model Findings" (Apr. 20, 2020); Chesapeake Bay Program, "Draft Actions/Decisions," (Dec. 17, 2020). In December 2020, the Principal Staff Committee of the Chesapeake Bay Program Partnership, of which Maryland is a participant, confirmed that "estimates for climate impact through 2035 indicate a doubling of the 2025 load effect. The effect of climate change on our ability to meet the Bay's water quality standards is a significant and increasing concern." Chesapeake Bay Program, "Draft Actions/Decisions," (Dec. 17, 2020). MDE and Exelon also agree that climate change will affect the environmental impacts the Dam:

> Conowingo Dam has trapped significant amounts of the nutrients and sediment present in the Susquehanna River. This in-fill material can be impacted by storm events, which likely will increase in intensity as a result of climate change.

Joint Motion of MDE and Exelon on the Joint Offer of Settlement and Issuance of License at 4.

As EPA itself pointed out, FERC failed to assess the effects of climate change over the course of the decades-long license in its EIS. EIS at H-45 to H-46. And, not only has FERC failed to supplement the EIS since, despite the significant changed circumstances and new information on climate change, *see* 40 C.F.R. § 1502.9; 18 C.F.R. § 380.1, FERC has failed to take a "hard look" at whether the changed circumstances and new information warranted supplementation. *See Norton*, 542 U.S. at 56 (2004); *Chem. Weapons Working Grp.*, 655 F. Supp. 2d at 35. In fact, in its Order, FERC fails to even mention "climate change." FERC has failed to satisfy NEPA and arbitrarily failed to consider an important aspect of the problem—climate change. *State Farm*, 463 U.S. at 43.

E. FERC Failed to Supplement The EIS Despite Changed Circumstances And New Information On Battery Storage Technology.

FERC must supplement the EIS to consider battery storage as a method to mitigate the demands of peaking generation on flow and the resulting harms to downstream water quality. 40 C.F.R. § 1502.9; 18 C.F.R. § 380.1; *see also* 42 U.S.C. § 4322. Since the EIS was finalized in 2015, more than six years ago, battery storage technology has advanced. Research by the U.S. Energy Information Administration shows "[l]arge-scale battery storage systems are increasingly being used across the power grid in the United States," as technology costs decrease and

regulatory hurdles are addressed.[5] And, FERC's Office of Environmental Projects recently approved a battery storage feasibility study at another dam.[6] At a minimum, FERC must take a "hard look" at whether the changed circumstance and new information on battery storage requires supplementation. *See Norton*, 542 U.S. at 56; *Chem. Weapons Working Grp.*, 655 F. Supp. 2d at 35. However, like climate change, FERC fails to even mention battery storage in its Order. FERC has failed to satisfy NEPA and arbitrarily failed to consider an important aspect of the problem—peaking demands on flow and potential mitigation measures. *State Farm*, 463 U.S. at 43.

F. FERC Failed to Supplement The EIS Despite Changed Circumstances And New Information On The Need for Financial Assurances.

In January 2021, after the May 2020 dam failures near Midland Michigan, FERC recognized that its prior licensing practices did not consider whether dams could meet future dam safety requirements, and that inadequate financing may threaten public safety and environmental resources. FERC, Staff Presentation on Financial Measures for Hydroelectric Projects, RM21-9-000 (Jan. 19, 2021); *see* 86 Fed. Reg. 7,081 (Jan. 26, 2021). This changed circumstance and new

[5] *See* U.S. Energy Information Administration, Battery Storage in the United States; An Update on Market Trends (July 2020).

[6] Letter from Terry L. Turpin to Angie Anderegg re: Determination on Requests for Study Modifications for the R.L. Harris Hydroelectric Project, eLibrary no. 20200810-3007 (Aug. 10, 2020), App. B, pp. B-9 – B-10.

information is relevant to environmental concerns, bears on the decision to license the Dam and its impacts over the 50-year license term, and required FERC to supplement the EIS. 40 C.F.R. § 1502.9(d); 18 C.F.R. § 380.1; 42 U.S.C. § 4322. Because FERC failed to supplement the EIS or consider financial assurances in its Order, it has failed to satisfy NEPA and acted arbitrarily. *See Norton*, 542 U.S. at 56 (2004)*; State Farm*, 463 U.S. at 43 ("entirely fail[ing] to consider an important aspect of the problem" is arbitrary"); *Chem. Weapons Working Grp.*, 655 F. Supp. 2d at 35.

CONCLUSION

For the reasons given above, FERC should vacate the Order.

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Respectfully submitted,

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