

TESTIMONY OF KATHLEEN BARRÓN OF CONSTELLATION
BEFORE THE FINANCE COMMITTEE OF THE MARYLAND STATE SENATE
ANNAPOLIS, MARYLAND
SENATE BILL 902 – OPPOSED
MARCH 1, 2022

Dear Chairman Kelley, Vice Chair Feldman, and Members of the Committee:

On February 2, 2022, Constellation completed its separation from Exelon, launching as the nation’s largest producer of carbon-free energy, a leading supplier of clean energy solutions to millions of homes and businesses, and owner and operator of the Conowingo Hydroelectric Generating Station (“Conowingo Dam”) – **Maryland’s largest source of renewable energy.**

As Constellation’s new Executive Vice President and Chief Strategy Officer, I want to thank you for the opportunity to submit written testimony about **Senate Bill 902 Dams With Hydroelectric Power Plants – Annual Compensation Fee**, a proposal that targets the Conowingo Dam and the historic settlement agreement that Constellation’s former parent-company Exelon executed in October 2019 with the Maryland Department of the Environment. The October 2019 MDE agreement resolved substantial disputes under Section 401 of the federal Clean Water Act that would have remained in litigation for years with no benefits to the Bay. The MDE agreement is being implemented now and it is providing critical protection of aquatic life and the long-term health of the Chesapeake Bay while preserving Maryland’s largest source of clean, renewable energy.

Constellation is a Maryland-based company having recently announced as part of its February 1, 2022 separation from Exelon that it will be headquartered in Baltimore City. We are committed to supporting the environmental goals of all our customers and communities, and foremost among those goals in Maryland is to promote clean water in the Chesapeake Bay. The Chesapeake Bay is one of the world’s largest and most biologically productive estuaries, an American treasure, and essential to Maryland’s identity. Constellation has been, and remains, committed to operating the Conowingo Dam in a manner that is environmentally responsible in all respects. That is why we agreed to the terms of the MDE agreement which provides substantial benefits to the Bay, valued at more than \$225 million. In fact, Constellation has already paid over \$5.5 million under the agreement. \$500,000 of this amount was placed in MDE’s Clean Water Fund in 2021 for the agency to implement resiliency projects in the Susquehanna River and Chesapeake Bay, such as SAV restoration, aquaculture, clam and oyster restoration, and living shoreline creation (next payment due for these projects is \$2 million in 2024). This is in addition to the 5 acres of land we are donating so that the state can build a hatchery for propagating water-filtering freshwater mussels in the river, a payment of \$2 million made in 2021 for mussel restoration, and a \$1.5 million payment for projects to improve water quality such as cover crops and forest buffers. In 2021, we also paid Maryland Department of Natural Resources (MDNR) \$1 million for eel passage research and MDE \$500,000 for a sediment disposal study. Going forward, Constellation has committed to continued payments under the MDE agreement to support these project and others intended to rebuild eel, mussel and migratory fish populations, clam and oyster restoration, and to reduce

nutrient and sediment pollution flowing down the river into the Upper Bay. Oversight payments were made to MDE and MDNR in the amount of \$150,000 in 2022 and we are scheduled to make a payment of \$250,000 in the next few weeks to the Clean Water Fund to aid mitigation of scour events to aid in SAV or other resiliency projects or trash and debris cleanup.

We believe these investments are not only in our best interest but are in the best interest of the Bay, in the best interest of the people of Maryland, and—at a time when the existential threat of climate change must be met with carbon-free sources of energy—in the best interest of our planet. **SB 902, the bill under consideration today, will jeopardize continued implementation of the MDE agreement and our ability to deliver these much-needed benefits.**

The bill purports to require the owner of a dam associated with a “certain” hydroelectric power plant to pay “an annual compensation fee” to the Maryland Department of the Environment “for the use of State land and waterways.” The fee applies only to “the owner of a dam associated with a hydroelectric power plant that has a generating capacity of at least 30 megawatts and is connected with the electric distribution grid serving Maryland.” **The Conowingo Dam is the only hydroelectric facility in Maryland that satisfies this criterion.** The bill calls for MDE to determine the annual fee, with the first fee to be determined based on the output of the dam multiplied by 80% of the average value (as determined by MDE) of Tier 2 Renewable Energy Credits (RECs) for 2020 and 2021. Based on current REC prices, this would amount to an ~\$10 million annual obligation.

As a threshold matter, the bill as drafted is legally flawed. Fundamentally, the imposition of a state “compensation fee” on the operation of a hydroelectric power plant located on the navigable waters of the United States is constitutionally preempted by the Federal Power Act because the Federal Energy Regulatory Commission (FERC) has exclusive jurisdiction with regard to the licensing and imposition of burdens upon hydroelectric power facilities on navigable U.S. waters, apart from the limited authority a State has to issue a Water Quality Certification under section 401 of the Clean Water Act . The U.S. Supreme Court has held that there must be federal control over the engineering, economic and financial soundness of a hydroelectric project in navigable waters, and that this preemptive federal authority leaves no room or need for conflicting state controls.¹ Further, SB 902 cannot authorize the Maryland Public Service Commission to prevent an increase in the hydroelectric power plant’s electricity rates as a means of offsetting the cost of the compensation fee, because the wholesale rates Conowingo receives for its generation are FERC-approved market-based rates that are clearly governed exclusively as a matter of federal law. Finally, and perhaps most importantly, the bill puts at risk the MDE agreement. If passed, SB 902 could provide a basis to nullify Constellation’s obligations under that agreement, as the MDE agreement expressly limits any further obligations that Maryland may seek to impose upon Constellation as it relates to the operation of Conowingo.²

With this background, we strongly urge you to reject this bill because it could jeopardize three sets of benefits that the Chesapeake Bay and the people of Maryland would otherwise enjoy as a result of the settlement for decades. Those three sets of benefits flow, first, from the Dam’s continued operations as Maryland’s largest source of clean, renewable energy; second, from the incorporated license conditions

¹ First Iowa Hydro-Elec. Co-op. v. Federal Power Commission, 328 U.S. 152 (1946), at 172, 181.

² MDE agreement § 3.6.

that are contained in the MDE agreement; and third, from additional, off-license commitments that Constellation had made. In my testimony today, I will briefly summarize all three sets of benefits.

Benefits from Conowingo's Continued Generation of Clean, Renewable Energy

The Conowingo Dam Project has been and remains Maryland's largest source of clean, carbon-free, renewable energy. The Project is a 573-megawatt hydroelectric power plant located on the lower Susquehanna River in Cecil and Harford Counties, about ten miles upstream from the River's confluence with the Chesapeake Bay. Conowingo generates safe, reliable power for about 165,000 homes in the region.

As a source of renewable electricity, Conowingo's operation does not produce any air pollution and contributes significantly to our collective struggle against climate change. Compared to a coal facility of similar size, the Conowingo Project avoids the release of 6.5 million tons of greenhouse-gas emissions annually – the equivalent to taking 1.4 million cars off of Maryland's roads. Indeed, the Project is a larger source of renewable energy than all other sources in Maryland combined. By keeping Conowingo in operation, the settlement agreement as approved by FERC allows the Project to continue supporting the State's long-term renewable and clean electricity goals, while minimizing air pollution.

The Conowingo Project also benefits marine and wildlife habitats. It provides breeding, nesting, and foraging grounds for the American Bald Eagle and helps migratory and native fish travel over the Dam for spawning in the Susquehanna River, using multimillion-dollar fish lifts. These benefits will be further enhanced under the settlement agreement, as I will explain shortly.

In addition to its positive impacts on climate change, air pollution, and fish and wildlife habitats, the Conowingo Project delivers economic, recreational, tourism, and community benefits. Specifically, it generates about \$273 million in annual economic benefits to Maryland and its local communities by supporting 265 full-time-equivalent jobs, attracting 365,000 recreational tourist visits per year, and contributing more than \$20 million to Cecil and Harford Counties' annual tax revenues. For nearby residents as well as visitors, the Conowingo Project provides opportunities for educational programs and for recreation, including boating, hiking, fishing, and birdwatching. It provides 15 recreational facilities and public-access areas, including boat launches, marinas, and scenic overlooks.

One of the Project's most important benefits is too often misunderstood or mischaracterized: Conowingo has been for nearly a century and remains today a positive influence on downstream water quality in the lower Susquehanna River and the Chesapeake Bay. Since its construction in 1928, the Dam has benefitted the Bay by trapping harmful pollutants (such as nitrogen, phosphorus, and sediment) discharged into the Susquehanna River by others, largely in Pennsylvania and New York, and preventing these pollutants from reaching the Bay. Conowingo Dam continues to do so, but its ability to trap pollutants is not unlimited, and the Reservoir behind the Dam is essentially full. More of what comes downstream in the River therefore passes into the Bay. But the Dam has never been the source of these pollutants, and no resolution of Conowingo's federal relicensing could hold the Dam responsible for a problem it did not cause and cannot control.

In a recent peer-reviewed paper³, a team of scientists from the University of Maryland Center for Environmental Science (UMCES) referred to Conowingo's presence as "an unintended watershed BMP [best management practice]." Their study found that the Conowingo Dam slows the River's flow and thereby increases "denitrification" (the escape of dissolved nitrogen into the air). As a result, the amount of dissolved nitrogen flowing away from the Dam and toward the Bay is usually less than the amount flowing toward the Dam from Pennsylvania. This net decrease in dissolved nitrogen is why a joint study by MDE and the U.S. Army Corps of Engineers found that the Bay's dissolved-oxygen level—a key positive indicator of the Bay's health, attributable to reductions in dissolved nitrogen flowing downstream—is "uniformly higher" with the Conowingo Dam and Reservoir in place than it would be without them. And even with regard to the phenomenon known as "scour," the recent UMCES study found that because the particulate (non-dissolved) nutrients that rest on the bottom of the Conowingo Reservoir and that may get "scoured" during large storms are relatively biologically inert (and thus not readily bioavailable for algal consumption), "scouring" has only a negligible impact on the Bay's dissolved-oxygen levels. Furthermore, although the region has seen serious storms in recent years, none has resulted in a "scour" event at Conowingo since Tropical Storm Lee in 2011.

Benefits from the New License Conditions that Maryland Negotiated

As a major part of the settlement with MDE, Constellation has implemented and will continue to implement significant changes in the Conowingo Project's flow regime, far beyond what was found to be necessary in FERC's environmental impact statement. The changes represent a significant portion of the changes to the flow regime that MDE had sought to impose in the original Section 401 certification that MDE issued in 2018. Though they will reduce the company's ability to generate electricity and cost the company millions of dollars in lost revenue over the license period, these changes will enhance habitat for aquatic species like American shad and river herring, which reside downstream of the Dam, and submerged aquatic vegetation, which trap sediment, remove pollution, and serve as a vital habitat to spawning and rearing fish.

As an example, March is an important month for fish migration and spawning. FERC's environmental impact statement for the Project concluded that requiring Constellation to maintain a minimum river flow of 3,500 cubic feet per second (cfs) throughout the month of March was adequate to protect water quality, fish habitat, and fish migration. Yet Constellation agreed for purposes of the settlement with MDE to maintain minimum river flows of 13,100 cfs from March 1 to 15 (almost four times the FERC rate) and 18,200 cfs from March 16 to 31 (more than five times the FERC rate).

In addition, although the FERC environmental impact statement did not find any up-ramping rate, down-ramping rate, or maximum flow restrictions to be necessary to protect water quality and fish habitat, Constellation agreed to constraints in each of these areas, which parallel the requirements that The Nature Conservancy sought. These substantial changes in the Project's flow regime were a major focus of MDE in the settlement discussions, as MDE contended they will reduce the potential for fish stranding, improve upstream movement of migratory fish species, and reduce adverse impacts to spawning.

The MDE agreement also has other provisions that MDE required to be accepted by FERC and were incorporated into the Project's license, which again echo provisions that MDE had sought to impose in the

³ [\(PDF\) Influences of a River Dam on Delivery and Fate of Sediments and Particulate Nutrients to the Adjacent Estuary: Case Study of Conowingo Dam and Chesapeake Bay \(researchgate.net\)](#)

original Section 401 certification. For example, freshwater eastern elliptio mussels serve as an important natural “filter” for the river water flowing into the Bay. In addition to substantial off-license investments in a mussel hatchery (which are described further below), Constellation agreed as part of the settlement to include in its FERC license significant changes in the Project’s support for the upstream transport of juvenile American eels, which are critical for expanding mussel populations. Specifically, Constellation agreed to three changes beyond other agreements reached with the U.S. Fish and Wildlife Service as part of an earlier settlement: first, Constellation will extend the operation of an existing eel “fishway” or ladder from September 15 until mid-to-late November, which involves additional operational costs designed to allow passage of more eels above the Dam; second, Constellation will extend a separate upstream eel-passage “trap and truck” program from 2030 to 2035; and third, Constellation will construct and operate a second eel fishway for at least ten years. Constellation valued the cost of these eel-passage improvements, which will help facilitate mussel restoration and thus reduce pollution, at \$11 million. Constellation also has pledged to continue its significant commitments, valued at \$41 million, to address the accumulation in the Conowingo Reservoir of trash and debris that float down from New York and Pennsylvania. These license conditions will improve water-based recreational activities at the Project and enhance aesthetic resources.

Finally, the settlement agreement’s license conditions include shoreline-management and stream-flow-monitoring plans that will enhance water quality, as well as turtle-management and waterfowl-nesting plans that will provide significant benefits to, and scientific data about, natural resources in and near the Project.

Benefits from Constellation’s Off-License Commitments

Constellation’s dedication to the Susquehanna River and the Chesapeake Bay is further reflected in a series of off-license funding commitments that Constellation agreed to during its settlement negotiations with MDE. These commitments are being funded from the Conowingo Project’s earnings and will establish and support ecosystem services and projects to enhance the water quality of the Bay and offset the harmful effects of pollutants deposited in the River by others. Constellation’s commitments include the following:

- **Climate Resiliency:** Constellation will fund more than \$45 million in climate resiliency projects, including submerged aquatic vegetation, aquaculture, clam and oyster restoration projects, and living shoreline creation. These projects will help improve habitat diversity, protect water quality, reduce wave intensity, and make the Susquehanna River and the Chesapeake Bay more resilient to severe weather events. A \$500,000 payment was made in 2021, with the next installment of \$2 million due in 2024.
- **Water-Quality Improvement:** Constellation will fund roughly \$19 million to support water-quality improvement projects, including forest buffers and agricultural projects such as cover crops to reduce runoff pollution. These projects will help absorb nitrogen and trap phosphorus-laden sediment before they can enter the Susquehanna River. And Constellation has committed \$3 million more to chlorophyll-A monitoring and reporting, to prevent impacts on the supply of drinking water drawn from the Conowingo Reservoir. Constellation also has committed more than \$12 million to support MDE and Maryland Department of Natural Resources staff who oversee efforts to protect the Chesapeake Bay. Initial payment of \$1.5 million was made in 2021.

- **Mussel Restoration and Eel Passage:** As noted earlier, freshwater mussels, carried upstream by American eels, serve as pollution filters in the Susquehanna River. Constellation has committed to contribute acres of land and to fund more than \$25 million to construct, operate, and maintain a 40,000-square-foot mussel hatchery that will significantly increase the River’s mussel population. In addition to the \$15 million worth of eel-passage improvements under the new FERC license (described earlier), Constellation has made an off-license commitment to contribute \$1 million to eel-passage research. Payments totaling \$3 million were made in 2021, \$2 million for mussel restoration, and \$1 million for eel passage research.
- **Dredging Studies:** Constellation has funded \$500,000 for a feasibility study for dredge-material disposal options, which will help determine whether the Reservoir’s sediment-trapping capacity can be expanded.
- **Transparency:** Constellation has agreed to maintain a public website containing plans, data, and reports related to the new license conditions that are designed to protect, mitigate damage to, and enhance fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality.

All these benefits from the MDE agreement, both the new license conditions and the off-license commitments, are in addition to changes Constellation agreed to make to Project operations in a 2016 settlement with the United States Fish and Wildlife Service (FWS), as part of this same Project re-licensing process. In its 2016 settlement with FWS, Constellation agreed to make major physical modifications to its fish and eel lifts and to take other actions to significantly expand fish and eel passage above the Dam. The total cost to Constellation of these settlement provisions with FWS over the term of the license was up to \$300 million. The MDE agreement contains further license changes and off-license commitments that are valued at an additional roughly \$225 million over the term of the license. In addition to these settlement benefits, FERC’s Final Environmental Impact Statement recommended that the final license include roughly \$175 million of other obligations relating to recreational facilities and rare, threatened, and endangered species. In total, Constellation thus will undertake up to \$700 million worth of improvements that will directly benefit citizens, water quality, and aquatic life in the state of Maryland. As discussed above, under the terms of the MDE agreement, SB 902, if passed, could nullify Constellation’s obligations under that agreement. **We therefore urge you to reject SB 902 and any other attempt to compromise the approved settlement agreement.**