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Elder Ghigiarelli, Jr.
Deputy Program Administrator
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Re: Conowingo Hydroelectric Plant Relicensing – FERC Docket No.: P-405-106
Exelon Generation Company, LLC Application # 17-WQC-02
Lower Susquehanna River and Upper Chesapeake Bay – Use 1 & 2 Waters
Supplemental Comments

Dear Deputy Administrator Ghigiarelli:

On behalf of the Clean Chesapeake Coalition ("Coalition"), we respectfully submit the following supplemental comments and recommendations regarding the application of Exelon Generation Company, LLC ("Exelon") to the Maryland Department of the Environment ("MDE") for a Clean Water Act Section 401 water quality certification ("WQC") for the relicensing of Exelon's Conowingo Hydroelectric Project by the Federal Energy Regulatory Commission ("FERC") (FERC Project No. 405). This letter is intended to supplement the Coalition's written comments submitted on August 16, 2017 and the Coalition's testimony during the December 5, 2017 public hearing hosted by MDE.

For the reasons outlined herein, the pending Clean Water Act ("CWA"), Section 401 water quality certification for Conowingo Dam by the State of Maryland is among the most important public agency decisions to be made on the Chesapeake Bay restoration continuum; which most will agree began in earnest in 1983 under the leadership of Maryland's own U.S. Senator Charles "Mac" Mathias with the creation of the state/federal Chesapeake Bay Program ("CBP") within the U.S. Environmental Protection Agency ("EPA"). Given the billions of dollars invested in water quality improvement and Bay restoration, and recognizing the enormous economic and ecological value of a thriving Chesapeake Bay, the State's Section 401 WQC for Conowingo Dam is priority number one in protecting all that we have done and are committed to doing in the name of saving the Bay.

Governor Larry Hogan and his Administration have an historic and powerful opportunity to meaningfully address and mitigate the harmful environmental impacts downstream on the Chesapeake Bay and the undermining of Bay restoration efforts attributable to the loss of trapping capacity above Conowingo Dam and the operation/maintenance of the Dam and reservoir system in the lower Susquehanna River. Through the exercise of its Section 401 WQC and conditioning authority, the State can significantly influence the priorities of the Chesapeake

Bay restoration and protection agenda in a common sense and cost-effective manner; and we encourage the Administration to do so. A change in trajectory is needed.

All correspondence, testimony, reports, studies, etc. referenced or cited herein or previously are incorporated into the Coalition's comments regarding Exelon's WQC application for Conowingo Dam and are hereby submitted into the official MDE record of these proceedings. To ensure that there is no question as to what constitutes the public record for purposes of the State's exercise of its authority under CWA Section 401 and that the record is sufficiently robust to inform the decision making, MDE is requested to hold an additional public hearing before any final determination on the WQC and conditions. The record and decision in this matter will directly impact FERC Project No. 405.

The Coalition submitted comments and recommendations during the development of the 2014 Chesapeake Bay Watershed Agreement ("Bay Agreement"). Among our written comments dated March 17, 2014 to the CBP was the following related to Conowingo Dam:

> "Given all that is known about the devastating impacts of nutrient and sediment loading due to scour from the Conowingo Pond, including the smothering of oysters and submerged aquatic vegetation in the upper Bay; and given the gross assumption in Appendix T of the 2010 Bay TMDL that the trapping capacity in Conowingo Pond would continue to 2025 (proven false by the August 2012 U.S. Geological Survey report by Robert M. Hirsh); and given how Bay restoration efforts and expenditures below the Dam are undermined or wasted when the Susquehanna swells, spill gates are opened and accumulated nutrient-laden sediments are scoured into the Bay, it is as shocking as it is disappointing that the Draft Bay Agreement is silent on the issue. In addition to the environmental and economic damage caused by the loss of trapping capacity in Conowingo Pond, and mindful that today there is nobody responsible for dredging or maintaining the reservoir, the Conowingo Dam has become a glaring symbol of the imbalance in the Bay clean up agenda; where we have gotten into the weeds and lost sight of the big watershed picture. If not the Chesapeake Bay Program, the Partnership or the Chesapeake Executive Council, where is the leadership on this critical issue for the Bay?"

Disappointingly, these comments were summarily dismissed, as the current Bay Agreement makes no mention whatsoever of the conditions at Conowingo Dam or the challenges to Bay restoration caused by the loss of trapping capacity above the dam. Meanwhile, at the urging of CBP and others, there's been legislation, regulations and billions of tax dollars spent implementing the Bay Agreement. This blind spot in the Bay Agreement (just like the blind spot in the 2010 Bay TMDL[1]) underscores the gravity of Maryland embracing the significance of its WQC decision to protect the Maryland portion of the Bay and the investments of Marylanders in

[1] See EPA's 2010 Chesapeake Bay TMDL, Appendix T.

Bay restoration. While he is Chairman of the Chesapeake Executive Council and public attention on the Conowingo factor justifiably mounts, Governor Hogan should use the State's analysis and decision on Conowingo WQC, along with the corroborating science, as justification for amending the Bay Agreement to add critical focus on sediment management in the lower Susquehanna River and downstream mitigation. Again, a change in trajectory is needed.

Meanwhile, the General Assembly has failed to address the Conowingo factor in terms of State policy and attention. It remains a mystery why the indisputable environmental policy expressed in Senate Joint Resolution 1 during the 2015 General Assembly[2] (urging Congress to review studies related to the enormous pollution loading to the Bay from the Susquehanna River basin for purposes of initiating and funding a project to address such unmitigated pollution source) was adopted unanimously by the Senate (47-0) only to be denied due consideration by the House of Delegates, and why Senate Joint Resolution 4 (titled Conowingo Dam – Sediment – Dredging)[3] during the 2014 Session met a similar fate – being adopted 46-0 by the Senate only to languish in the House. The failings of the General Assembly in this regard further underscores the weight of the Administration's role in protecting Maryland's waters and investments in the Conowingo WQC decision and conditions.

The once-in-a-generation significance of Maryland's WQC review for Conowingo Dam relicensing is magnified further by the inadequate environmental impact review undertaken thus far by FERC to protect Maryland waters and the deficiencies in Exelon's Final License Application to FERC (as noted by DNR in FERC Project No. 405). Simply put, we cannot depend on FERC to look out for Maryland or to adequately protect our environment. Given the magnitude of the impact of the Conowingo Dam and the other lower Susquehanna River energy projects on Marylanders, including but not limited to the citizens and human environment of the Coalition counties, and on the water quality of the Bay, we encourage MDE to request at the appropriate time an adversarial hearing to compel the hearing officers in FERC Project No. 405 to engage in an appropriate fact finding process to ensure that the future operation and maintenance by Exelon will not violate State water quality standards and limitations. Such a proactive approach in the FERC arena would help leverage Maryland's Section 401 WQC review authority and proposed conditions.

Still missing from the Conowingo Dam WQC equation is the pending recalibration of the Bay TMDL (as part of the 2017 midpoint reassessment) and the pollution reduction allocations among the Bay states. In terms of adaptive management and the larger Bay restoration picture, Maryland's WQC for Conowingo Dam and the recalibration of the Bay TMDL are not mutually exclusive. In order to grant WQC approval, MDE must certify that the operation and

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[2] See: http://mgaleg.maryland.gov/webmga/frmMain.aspx?id=sj0001&stab=01&pid=billpage&tab=subject3&ys=2015rs

[3] See: http://mgaleg.maryland.gov/webmga/frmMain.aspx?id=sj0004&stab=01&pid=billpage&tab=subject3&ys=2014rs

maintenance of Conowingo Dam and reservoir system will not violate State water quality standards and limitations, which necessarily include the Bay TMDL. By MDE's own acknowledgment, the loss of long-term sediment trapping capacity at Conowingo Dam is causing impacts to the health of the Chesapeake Bay ecosystem and the additional nutrient pollution associated with the conditions in the lower Susquehanna River system could result in Maryland not being able to meet Chesapeake Bay water quality standards, even with full implementation of WIPs by 2025.

Conditions

Conditions on any WQC for Conowingo Dam are imperative to mitigate the harm to the Bay's ecology, to downstream restoration efforts and to the human environment of Bay jurisdictions, and to improve downstream Bay water quality through the term of next long-term FERC license; all the while holding federal and State agencies accountable for their roles in the dam relicensing and Bay restoration generally.

We reiterate our request that Coalition counties be specifically referenced in WQC conditions that are designed to mitigate damages associated with the ecological and economic harm from nutrient laden sediments entering the Maryland portion of the Bay through Conowingo Dam. Such inclusion will enable the Coalition to participate in post-license proceedings with FERC regarding matters that may impact State waters and the environments of Coalition counties, including the opportunity to challenge FERC in denying or refusing to enforce State recommended WQC license conditions and agreements.

Mitigation Fund

We reiterate our recommendation for a dedicated evergreen fund financed by Exelon to help Maryland mitigate the undeniable environmental and economic damages caused by the scouring and release of nutrients, sediments and other contaminants trapped behind Conowingo Dam into the Bay; and to make up for the ground lost in meeting Bay TMDL goals whenever a storm hits and Exelon opens the flood gates.

With any such dedicated fund for mitigation, there must be proper oversight, accountability and transparency; and by no means should any such fund simply default to supporting tired programs, policies and practices espoused by the entrenched environmental NGO bureaucracy that are cost-ineffective and/or do not yield measurable improvements to water quality. Indeed, the managers of such a fund will need to discern the special interests with a track record for touting the "fasting growing pollution source" *du juor* and who are so vested in the current "blueprint" for saving the Bay that they mute the voices of other stakeholders and eschew common sense solutions.

True to the Coalition's mission since inception, we endorse a dedicated mitigation fund to improve Bay water quality in the most prudent and fiscally responsible manner possible.

We've noted the recent Chesapeake Bay Foundation and The Nature Conservancy report (released on the day of MDE's WQC public hearing in December) claiming Exelon is rich and can easily afford to financially participate in mitigating the downstream ecological damage to the Bay attributable to loss of trapping capacity behind Conowingo Dam[4] and a subsequent countervailing report from Exelon claiming they are poor and can barely make ends meet in their operation of Conowingo Dam[5]. Suffice it to say there is no income test for the WQC sought by Exelon. To the extent affordability is a factor in conditioning the WQC, we offer the following as "food for thought" in terms of spreading costs to do what is needed:

> For nearly four decades, Maryland residents and businesses have paid more to clean and restore the Bay than the residents and businesses of any other Bay watershed state
>
> Exelon owns three major power plants in the lower Susquehanna River basin that generate a significant amount of low cost power and that could not operate but for the existence of the Conowingo Dam and its 14-mile reservoir known as Conowingo Pond:
>
> 1. The Conowingo Hydroelectric Power Plant – the water behind the dam turns the turbine generators that create power;
>
> 2. The Muddy Run Hydroelectric Power Plant – water pumped nightly from the Conowingo Pond to the Muddy Run Reservoir is used to turn the turbine generators that create power. If the Conowingo Pond did not exist, there would not be a sufficient reservoir of water in the lower Susquehanna River to nightly withdraw the water necessary to power the Muddy Run turbine generators; and
>
> 3. The Beach Bottom Nuclear Power Plant – water from the Conowingo Pond is used to cool the nuclear reactors – there would not be a sufficiently reliable source of cooling water if the lower Susquehanna River had not been dammed at Conowingo.
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> Power generated by the above three power plants is cheaper than other sources of power because Exelon does not have to pay one penny for the water in the Conowingo Pond that it uses and relies upon to generate such power.

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[4] See: http://www.cbf.org/document-library/non-cbf-documents/economic-analysis-of-the-conowingo-hydroelectric-generating-stations-public.pdf

[5] See: http://chestertownspy.org/2018/01/03/exelon-analysis-shows-conowingo-revenues-insufficient-to-fund-additional-sediment-mitigation/

The power generated by the above three power plants is supplied to PJM Interconnection – a regional transmission organization that operates the regional power grid and wholesale electricity market. PJM coordinates the movement of wholesale electricity in all of the Bay watershed states of Maryland, Delaware, Pennsylvania, Virginia, and West Virginia, as well as in Illinois, Indiana, Kentucky, Michigan, New Jersey, North Carolina, Ohio, Tennessee, and the District of Columbia. PJM is currently one of the largest competitive wholesale electricity markets in the world, with more than 900 member companies and **61 million** customers (rate payers). The power generated from the above three power plants is cheaper than most, if not all, other sources of power because virtually nothing is paid to remediate the pollution loading to the Bay exacerbated by Conowingo Dam. The pollution attributable to Conowingo Dam consists of the sediments, nutrients and other contaminants that have been trapped behind the dam for almost 90 years and are scoured from the floor of the Conowingo Pond and dumped in the upper Bay in shock loadings during moderate and high flow storm events and snow melts. Conowingo Pond has never been dredged and there is no commitment, plan or budget to specifically address the devastating amounts of nutrients, sediment and other contaminants that are scoured into the Bay during storm events and in equally harmful proportions on a regular basis because the Conowingo Pond is full. Those sediments kill oysters and submerged aquatic vegetation in the upper Bay that serve as the best natural filters of pollution in the Bay. When the dam was first built, the depth of the water behind the dam was 120 feet during much of the run between the Holtwood Dam and the Conowingo Dam. Now the average depth is no more than 15 feet or less over the vast majority of that stretch of the lower Susquehanna River.

Chesapeake Bay clean-up efforts should be supported to some degree by all of the customers on the PJM power grid that benefit from the low-cost power from the above three Exelon power plants; made possible because nothing has been spent to offset the sediment scour pollution to the Bay attributable to the Conowingo Dam and the loss of trapping capacity in Conowingo Pond.

Reopeners

Given the term of relicense sought by Exelon from FERC, and to enable ongoing adaptive management for the betterment of the Bay and downstream water quality, reopeners with triggers are imperative and should be built into any Conowingo WQC approved by Maryland. For example, it is expected that much will be learned from the "Conwingo Capacity Recovery & Innovative Reuse and Beneficial Use Pilot Project" announced by Governor Hogan during his 2nd Conowingo Dam Summit in August 2017 and under management of the Maryland Environmental Service. Moreover, there is still a paucity of publicly available data regarding the quality of the accumulated sediments above Conowingo Dam (i.e., the degree of other pollutants/

contaminants in addition to nitrogen and phosphorus) at depths beyond shallow borings and throughout the entire 9,000-acre reservoir.

Other reopener triggers that should be considered during the term of license include episodic storm events, the availability of regulated nutrient trading/offsets and new or improved science.

Summary

There is no denying that the Conowingo Dam and other hydroelectric power dams in the lower Susquehanna River have profoundly altered the lower Susquehanna River estuary and the Chesapeake Bay estuary. If the ongoing impacts from the operation and maintenance (or lack thereof) of Conowingo and the other power projects in the lower Susquehanna River are not adequately addressed at this juncture, the downstream efforts and expenditures undertaken by Marylanders will not achieve meaningful and lasting improvement to the upper Bay or overall Bay water quality. Once again, a change in trajectory of the Bay agenda is needed.

As evidenced, we cannot rely on FERC, on other Bay watershed states, on EPA or their Chesapeake Bay Program, on the General Assembly or on Exelon's corporate environmental stewardship ethos to adequately address the Conowingo Dam factor for the utmost protection of the Maryland portion of the Chesapeake Bay. We are trust that the Hogan Administration will fully maximize the leverage of its CWA Section 401 WQC review and approval authority over Conowingo Dam relicensing for measurable water quality improvement, the betterment of the Bay's ecology, and to safeguard our substantial downstream Bay restoration investments.

Given the enormity of the decision at hand and in the interest of transparency, we encourage MDE to provide the general public with an opportunity to review and comment on any draft WQC for Conowingo Dam and associated conditions prior to any final determination.

Thank you for your attention and consideration of these supplemental comments as part of MDE's WQC review and conditioning process.

Sincerely,

Ronald H. Fithian, *Chairman*
and Kent County Commissioner

cc: Clean Chesapeake Coalition
Distribution List