

# **Exhibit 29**



June 18, 2018

Mr. William Seiger  
Chief, Waterway Construction Division  
Water and Science Administration, Wetlands and Waterways Program  
Maryland Department of the Environment  
1800 Washington Boulevard  
Baltimore, MD 21230

**Re: Case No. 201860797 / 18-NT-0152, Maryland Environmental Service Joint Application for Federal and State Permits for Proposed Conowingo Capacity Recovery and Innovative Reuse and Beneficial Use Pilot Project**

Dear Mr. Seiger:

Exelon Generation Company, LLC (“Exelon”), owner and operator of the Conowingo Hydroelectric Project (“Conowingo Project”), appreciates the opportunity to provide comments to the Maryland Department of the Environment (“MDE”) on the Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal, or Nontidal Wetland in Maryland (“Application”) submitted by the Maryland Environmental Service (“MES”) for its proposed Conowingo Capacity Recovery<sup>1</sup> and Innovative Reuse and Beneficial Use Pilot Project (“Pilot Project”).

The Application includes multiple statements indicating that MES intends to use the Pilot Project to determine the feasibility of a large-scale project to dredge and reuse the accumulated sediments in Conowingo Pond.<sup>2</sup> The Application also states that the Pilot Project will evaluate whether such large-scale dredging “will help improve the health of the Chesapeake Bay.”<sup>3</sup> The Pilot Project will not accomplish these goals. The Pilot Project, even if successfully performed, will have limited use, if any, because it is not designed to test whether large-scale dredging of

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<sup>1</sup> As Exelon noted in its April 5, 2018 letter to MES, Conowingo Pond’s usable water storage capacity is not impacted by sedimentation, as MES originally asserted in the draft materials provided to Exelon for comment. Therefore, Exelon objects to the characterization of the Pilot Project as a “capacity recovery” project. In addition, while MDE created a separate section on its website for the Pilot Project materials (including the Application), the Pilot Project Application and public notice also appear on the section of the MDE website dedicated to Exelon’s application for a water quality certification for the Conowingo Project. This inappropriately gives the appearance that the Pilot Project is related to Exelon’s water quality certification application.

<sup>2</sup> See, e.g., Application at 2 (“The purpose of the Conowingo capacity recovery and innovative reuse and beneficial use pilot project is to evaluate the feasibility of a scalable project to dredge accumulated sediments and beneficially or innovatively reuse them within the new Maryland guidance framework.”); *id.* at 5 (“The Conowingo Pilot Project will determine if dredging and innovative reuse and beneficial use can be performed on a larger scale . . .”). Not all pages in the Application contain page numbers. Therefore, the page citations in this letter refer to the PDF page number in the copy of the Application available on the MDE website.

<sup>3</sup> Application at 67 (“The purpose of this pilot project is to evaluate whether large-scale dredging of the sediment and associated nutrients behind the Conowingo Dam will help improve the health of the Chesapeake Bay.”).

Conowingo Pond is feasible. MES purposefully chose a dredge site expected to maximize the feasibility of beneficial reuse while minimizing potential environmental and logistical issues associated with dredging, but which is not representative of the Maryland portion of Conowingo Pond. Moreover, the Pilot Project does not include any measures to study whether large-scale dredging will improve the health of the Chesapeake Bay and inadequately measures adverse impacts from the Pilot Project, let alone dredging on a large-scale. Overall, the Pilot Project will not inform any analysis of large-scale dredging.

The Application's stated public need for the Pilot Project therefore lacks foundation. The Pilot Project has not been designed in a manner that is scalable, or that will support any determination regarding the feasibility of a larger scale project. The Application's statement of public need also improperly implies a long-term benefit associated with a large-scale dredging project. But the potential, if any, for such a project to provide long-term benefits to the health of the Chesapeake Bay has not been determined and will not be assessed by the Pilot Project. Indeed, the Lower Susquehanna River Watershed Assessment—a study conducted by the Baltimore District of the U.S. Army Corps of Engineers (“Corps”) and MDE—concluded that “[i]ncreasing or recovering storage volume of [the Susquehanna River] reservoirs via dredging or other methods is possible, but the Chesapeake Bay ecosystem benefits are minimal and short-lived, and the costs are high.”<sup>4</sup> Accordingly, MES should reassess whether there is public need for the Pilot Project.

Finally, the Application is missing crucial details regarding the proposed Pilot Project and fails to adequately address the potential environmental and navigational impacts that will result from the Pilot Project. MDE should not grant the Application until MES addresses these deficiencies. In addition, the activities proposed as part of the Pilot Project do not appear to be covered by the two types of Regional General Permits issued by the Corps for projects with minor impacts: the Maryland State Programmatic General Permit 5 (“MDSPGP-5”)<sup>5</sup> or Nationwide Permit.<sup>6</sup> Therefore, MES should be required to seek an individual permit from the Corps for the Pilot Project under section 404 of the Clean Water Act (“CWA”)<sup>7</sup> and section 10 of the Rivers and Harbors Act of 1899,<sup>8</sup> which will ensure that the Pilot Project receives appropriate review under the National Environmental Policy Act (“NEPA”).<sup>9</sup>

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<sup>4</sup> U.S. Geological Survey, *et. al.*, *Lower Susquehanna River Watershed Assessment, Maryland and Pennsylvania*, at ES-5 (May 2015); *see also id.* at 162. Using the bids MES received for the Pilot Project, it would cost approximately \$942 million to \$1.1 billion dollars a year just to dredge the estimated 3 million cubic yards of material a year that flows into Conowingo Pond from upstream sources, which is even higher than the \$48 million to \$267 million a year the LSRWA predicted would be necessary to dredge the same amount.

<sup>5</sup> *See* MDSPGP-5 at 4 (“Activities Not Authorized by the MDSPGP-5: . . . Single and complete projects . . . which will result in more than one acre (43,560 square feet) of impact, both direct and indirect, to waters of the United States, including jurisdictional wetlands and/or 2,000 linear feet of streams, rivers, and other open waters.”).

<sup>6</sup> Nationwide Permit 19 only authorizes minor dredging projects of no more than 25 cubic yards.

<sup>7</sup> 33 U.S.C. § 1344.

<sup>8</sup> *Id.* § 403.

<sup>9</sup> At the June 4, 2018 Public Informational Hearing, MES informed Exelon that it expects to receive a Corps Letter of Permission for the Pilot Project. Letters of Permission have an abbreviated review process without an individual public notice and are categorically excluded from NEPA documentation. Exelon does not believe that this abbreviated, limited form of review is appropriate in light of the potential environmental and navigational impacts of the Pilot Project. *See* 33 CFR § 325.2(e)(1).

## ***The Pilot Project Will Not Demonstrate the Feasibility of a Large-Scale Dredging Project***

The Application states that the purpose of the Pilot Project is “to evaluate the feasibility of a scalable project to dredge accumulated sediments and beneficially or innovatively reuse them within the new Maryland guidance framework.”<sup>10</sup> However, as MES acknowledges in its Application, MES selectively chose a site with sediment properties that would maximize the feasibility of beneficial reuse.<sup>11</sup> However, these properties are not representative of sediment in the Maryland part of Conowingo Pond. MES also chose a dredge site intended to minimize environmental and logistical constraints that would hinder a large-scale dredging project. Therefore, information gained from the Pilot Project will not demonstrate that such a project could be scaled up to the remainder of the Maryland part of Conowingo Pond.

Maryland Geological Survey (“MGS”), at the behest of MES, searched for a predominantly sandy site in water with a minimum depth of 10-feet.<sup>12</sup> MGS identified only two locations in the Maryland portion of Conowingo Pond where these criteria co-exist, both of which are near the Maryland-Pennsylvania border. This finding aligns with the results of previous studies of Conowingo Pond sediment, which indicate that the occurrence of sand deposits in the Maryland part of Conowingo Pond are limited to the region of the Maryland-Pennsylvania border.<sup>13</sup> In contrast, the remainder of the Conowingo Pond in Maryland is characterized by deeper water with lower energy conditions where fine sediments settle from suspension in the water column and accumulate as homogenous deposits of silt and clay with the sporadic and limited occurrence of storm-derived sands. As MES concedes in the Pilot Project FAQ, these characteristics would make dredging of sediment near Conowingo Dam more difficult than the proposed dredge site.<sup>14</sup>

MES also selectively chose a site that minimizes logistical issues that would be unavoidable for a large-scale dredging project, or even a project of a similar size but in a different location. As MES notes in the Application, because an active railroad line runs along the entire eastern shore of Conowingo Pond, the “[dredging] pipeline would not be able to cross the tracks, severely limiting project access to potential staging areas . . .”<sup>15</sup> This means the only available location for a dredging pipeline route on the eastern shore of the Maryland part of Conowingo Pond is under the low-clearance bridge at the mouth of Conowingo Creek.<sup>16</sup> While this bridge is

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<sup>10</sup> Application at 3.

<sup>11</sup> *Id.* at 34 (“Because one of the goals of the Conowingo Pilot Project is to beneficially reuse or innovatively use the dredged material within the State of Maryland, initial site selection for the dredging area focused on identifying a site with predominantly sandy dredged material that could be readily dewatered and processed for innovative reuse and/or beneficial use.”).

<sup>12</sup> *Id.* at 126 (“MGS collected cores from a 600-by-600 foot square within the State of Maryland, where the depth of the water is no less than 10 feet and where the sediment is sandy in texture”).

<sup>13</sup> AECOM. 2015. Conowingo Pond Coring Study. Integrated Sediment and Nutrient Monitoring Program; SRBC. 2006. Comprehensive Analysis of the Sediment Retained Behind Hydroelectric Dams of the Lower Susquehanna River. Characterization of bed sediment behind the lower three dams on the Susquehanna River. Susquehanna River Basin Commission Publication 239.

<sup>14</sup> Conowingo Pilot Project Frequently Asked Questions (FAQs), at 2 (April 201[8]) (“Q: Why was that dredge area selected? Why not closer to the dam? A: The dredging location [was] selected based on multiple factors, including water depth and sediment type. A relatively shallow water depth is desirable for the pilot project so larger equipment is not necessary (it gets deeper near the dam and main channels). Known sandier deposits were targeted, as sand is better suited material for reuse, and is quicker and easier to dewater.”).

<sup>15</sup> Application at 34.

<sup>16</sup> *Id.*

only three miles from the proposed Pilot Project dredge site, it would be much farther from other locations in Conowingo Pond. MES also was able to choose a location that avoided any potential impacts to other infrastructure that is located in or utilizes Conowingo Pond, such as utility lines, municipal water intakes, and cooling water intakes for electric generating facilities. Indeed, the original dredge site MGS selected was changed precisely because of the presence of a utility line.<sup>17</sup> Avoiding these logistical issues, however, would be challenging for a large-scale dredging project. Similarly, MES chose a location that would minimize environmental impacts, including impacts on rare, threatened, and endangered species, a luxury that would not exist for a large-scale dredging effort.

Moreover, the environmental impacts of dredging, many of which MES cursorily dismisses as “temporary, and localized at the point of dredging” for the Pilot Project,<sup>18</sup> would be magnitudes greater for a large-scale dredging project and, indeed, neither temporary nor localized. Specifically, while the intent of the larger scale dredging project is capacity recovery, this is not the intent of the Pilot Project. With respect to the intentional permanent changes to bottom contours of a larger scale dredging project, it should be expected that there would be changes to river currents, the aquatic food chain and habitats, and recreational use.

The effects of plumes that may develop at a single dredging site such as that proposed in the Pilot Project would be compounded by the concurrent operation of multiple dredging sites. The probability of a detrimental effect of a dredging project from exposure to resuspended particles can be viewed as a combination of concentration and duration,<sup>19</sup> both of which would be substantially greater for a large-scale dredging project than for the Pilot Project. Large-scale dredging could adversely impact fish and benthic organisms, including the beds of aquatic vegetation known to be in Conowingo Pond. The increased turbidity associated with a large-scale dredging project also would affect the public water supply intakes<sup>20</sup> in Conowingo Pond. And, nearby noise receptors that may be adversely impacted include boaters and shoreline users as well as terrestrial wildlife and aquatic biota. Bald eagles are particularly sensitive to such noise during the nesting and wintering periods.

While the dewatering site for the Pilot Project is only five acres, the development of a dewatering site of sufficient size for a large-scale dredging project could result in significant land use changes, as a substantial amount of land clearing and grading would be needed to produce a suitably large and flat site. For example, a dewatering site of approximately 400-600 acres would be needed to accommodate 2-3 million cubic yards of sediment,<sup>21</sup> which is the amount of sediment estimated to flow into Conowingo Pond each year from upstream sources. Some potential land use changes that could result from construction of the dewatering facilities include deforestation and loss of terrestrial habitat, fragmentation of existing terrestrial habitat, and increased runoff

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<sup>17</sup> Addendum No. 3 to the Request for Proposals for the Pilot Project, dated October 6, 2017, informed potential bidders that the site originally selected for dredging needed to be moved because of the proximity of an underwater utility line.

<sup>18</sup> Application at 29. MES’ conclusion that the effects of the Pilot Project will be temporary is questionable given that MES will not return the river depth contours to pre-disturbance conditions at the conclusion of the Pilot Project.

<sup>19</sup> Clarke, D. G., and Wilber, D. H. “Assessment of potential impacts of dredging operations due to sediment resuspension,” DOER Technical Notes Collection (ERDC TN-DOER-E9). 2000.

<sup>20</sup> The City of Baltimore and Chester Water Authority both use Conowingo Pond as a source for public water supply.

<sup>21</sup> This figure is a linear proration based on the five-acre site allocated to process 25,000 cubic yards for the Pilot Project.

generated by impervious surface areas. Similarly, the amount of time required to dredge Conowingo Pond would be much longer, potentially spanning multiple years.<sup>22</sup> This would impact the character of the area as well as the environment.

The Application does not provide any details regarding the processing and transportation of the dredge material for beneficial reuse and does not specify whether there is a demand or use for the resulting material. For a large-scale dredging project, it would likely be extremely difficult to identify a reasonably available, beneficial use for the high volume of dredged material. Indeed, as the Maryland Department of Transportation, Maryland Port Administration's 2017 Annual Report of the Dredged Material Management Program ("DMMP") demonstrates, implementing a dredge and beneficial reuse program for even the much more limited quantity of material dredged from the Baltimore Harbor and Chesapeake Bay Channels has been logistically difficult and remains an aspirational goal.<sup>23</sup>

### ***Failure to Analyze Potential Environmental and Navigational Impacts***

The Application indicates that MES is seeking a Non-Tidal Wetland License, a permit under CWA section 404,<sup>24</sup> and a water quality certification under CWA section 401.<sup>25</sup> The proposed activities also fall under the jurisdiction of Section 10 of the River and Harbors Act of 1899.<sup>26</sup> Yet the Application fails to discuss the significant environmental and navigational impacts of the Pilot Project on the Susquehanna River or demonstrate that the Pilot Project will comply with Maryland's water quality standards. In addition, the Application does not sufficiently address potential impacts to rare, threatened, and endangered species.<sup>27</sup> Some of the Application's major deficiencies are discussed below.

### **Impacts on Waters of the United States**

The Pilot Project proposes the dredging of approximately 25,000 cubic yards of sediment and disturbing about 6 acres of river bottom,<sup>28</sup> the placement of approximately 3,000 to 3,500 linear feet of up to three floating pipelines across the surface of the river, and the placement of one or more booster pumps on a float in the nearshore area. During dredging it appears that nearly 75-80 percent of the river will be obstructed. Nonetheless, the Application's discussion of navigational impacts of the Pilot Project is limited to noting that all in-water equipment will be

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<sup>22</sup> Utilizing MES' estimate that it will take 100 days to dredge 25,000 cubic yards, it could take 8,000 days (22 years) to 12,000 days (33 years) if dredging was conducted sequentially. Even if the dredging was expanded to be five times larger it would still take 4 to 7 years.

<sup>23</sup> Maryland Department of Transportation, 2017 Annual Report to the Dredged Material Management Program (DMMP) Executive Committee: Implementation of the Dredged Material Management Act of 2001, at 10 (Nov. 9, 2017) (noting that it is a challenge to identify "adequate space to implement [Innovative Reuse] on a meaningful scale in the near- and long-term . . .").

<sup>24</sup> 33 U.S.C. § 1344.

<sup>25</sup> *Id.* § 1341.

<sup>26</sup> *Id.* § 403.

<sup>27</sup> Exelon previously provided comments to MES on its draft Application identifying numerous concerns regarding potential environmental impacts resulting from the Pilot Project, many of which have not been addressed in the Application. Exelon has provided those comments as Attachment A and incorporates those comments by reference.

<sup>28</sup> Although the Application states that the dredging area is approximately five acres in size, using the dimensions provided in the Application, it appears that the area of disturbance will be approximately 5.7-6.2 acres.

marked and lighted in accordance with US Coast Guard regulations.<sup>29</sup> In this location of Conowingo Pond there are two channels, one of which will be obstructed during dredging. It is unclear from the Application whether the remaining unobstructed 20-25 percent of the river will be sufficient for boats to pass, which is particularly concerning given that the Pilot Project is scheduled to occur during peak boating season. This issue needs to be addressed, especially in the event of emergency passage. MES should develop an aid to navigation plan to ensure that the dredging pipeline will be adequately identified and boaters are able to navigate the river safely during the pendency of the Pilot Project.

The Application also does not attempt to demonstrate that the Pilot Project will comply with Maryland's water quality standards, as required by CWA section 401. The core sample data included in the Application indicates that numerous substances—including arsenic and TPH—are present in the sediment to be dredged, often at concentrations that exceed Maryland's standards. The Application does not indicate what will be done to avoid potential environmental impacts of dredging sediment that contains these substances, including potential groundwater impacts at the dewatering site, or include an effluent monitoring plan to ensure that any chemicals disturbed during dredging will not cause a violation of Maryland's water quality standards.<sup>30</sup> Such a plan could be particularly necessary for the Pilot Project given that recent research by the University of Maryland Center for Environmental Science suggests that ammonium may be released when water is added to sediment to create a slurry during dredging and ammonia gas may be released during dewatering.<sup>31</sup> And, soluble reactive phosphorus which will bind to iron oxide minerals during the dredging process may be released during dewatering. MES also proposes to use booster pumps, at least one of which will be located in the Susquehanna River, but does not address or provide a plan for potential spills from these pumps. Further, the Application does not address the potential environmental impacts of truck traffic from the Pilot Project, which is particularly concerning given that the proposed transportation route runs along a stream.<sup>32</sup>

Additionally, coal is a significant constituent of Conowingo Pond sandy sediments.<sup>33</sup> The Application notes that the location of the dredge site visually has more coal than the original site.<sup>34</sup> MGS previously found that coal in Conowingo Pond sands readily breaks apart into finer coal particles during the mechanical sieving of sediment for grain-size analysis.<sup>35</sup> The Application

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<sup>29</sup> Application at 29 (“All in-water equipment, including the dredge, pipeline, booster pumps, and support vessels, will be marked and lighted at night according to US Coast Guard regulations.”).

<sup>30</sup> *Id.* at 152 & 160.

<sup>31</sup> Cornwell, J., M.Owens, H. Perez, and Z. Vulgaropoulos. 2017. *The Impact of Conowingo Particulates on the Chesapeake Bay: Assessing the Biogeochemistry of Nitrogen and Phosphorus in Reservoirs and the Chesapeake Bay*. UMCES Contribution TS-703-17. July 28, 2017.

<sup>32</sup> MDE also regulates a 25-foot buffer around delineated non-tidal wetlands but, according to the Application, “wetland buffer impacts [were] not included” in MES’ consideration of potential impacts. Application at 71.

<sup>33</sup> AECOM 2015; SRBC 2006; Hainly, R.A., Reed, L.A., Flippo, Jr., H.N., and Barton, G.J, 1995, Deposition and simulation of sediment transport in the Lower Susquehanna River reservoir system: U.S. Geological Survey, Water-Resources Investigations Report 95-4122, 39p.

<sup>34</sup> Application at 138. MGS *Coastal and Environmental Geology File Report No. 17-13* (October 2017).

<sup>35</sup> SRBC. 2006. p. 6 (“During the sieving operation to remove the coarse sand sized particles it was noted that the more the coal was washed the more that passed through the sieve. Effectively the coal was breaking apart during the mechanical separation producing finer coal particles. Coal is friable and this is to be expected. Consequently, the grain size measured would not be the grain size found in the sediment.”).

addresses neither the general environmental impacts of coal particles nor the potential impacts of mechanically processing and handling large amounts of coal in the dredged sediment.

Furthermore, the Application fails to address the impact of the proposed staging area, pipeline, and access roads on stormwater and the perennial stream near pipeline route 2. For example, the Application does not include details showing how stormwater runoff will be routed or controlled around these project features to minimize erosion and the conveyance of sediment. It should be noted that some of this area is characterized by steep slopes (>25%) and the predominant soil type is McD2, Manor channery loam, which is a moderately erodible soil.<sup>36</sup> Although, the limits of disturbance for pipeline route 2 are within the 50-foot stream buffer of the perennial stream, the Application does not include any protective measures for the stream.

### **Impacts on Rare, Threatened, and Endangered Species**

The wetland delineation report states that no wetlands are present in the project area but does not provide data to support this conclusion such as wetland delineation forms. MES also completed the wetlands delineation for the Pilot Project in December 2017 and January 2018 when the ground was frozen and few plants were present for identification. While winter delineations have been accepted by the Corps, winter is not the ideal time of year for performing delineations. The existence of wetlands in or near these areas is important because northern Harford County is within the range of the state- and federally-listed Bog Turtle, which could potentially occur in any wetlands. Bog turtles are known to prefer wetland habitat with spring seeps. The springhead for the perennial stream near pipeline route 2 may provide such habitat. If this is a wetland area, the Maryland Department of Natural Resources' Wildlife and Heritage Service recommends a Phase I Bog Turtle habitat assessment.

The state-listed endangered Northern map turtle uses a wide array of sites for nesting during spring and summer months, including soft sand/soil areas exposed to full sunlight within a few meters of the shoreline, areas under dense canopy where sunlight is limited, and at distances of up to 63 meters from the shoreline. Preliminary data from research being conducted by Towson University indicate that the map turtle has a wide distribution in the area upstream of Conowingo Dam and could be present at sites near or in the proposed Pilot Project dredge site. The Application does not provide information on how this species will be protected in the areas of disturbance. The Application also does not include information on how map turtle, the state-listed threatened Chesapeake Logperch, or other species which reside in the water will be protected from being impinged or entrained by intakes to the booster pumps and hydraulic dredge.

In addition, MES initially represented to Exelon and the resource agencies that dredging work would commence in June or July of 2018 and would continue for approximately 100 days, but it is unclear how MES will be able to meet this timeline given the number of outstanding permits and approvals that MES or its contractor must still obtain. For example, MES still has not filed an application with the Federal Energy Regulatory Commission to seek authorization for a non-project use of Conowingo Pond. Moreover, today MES announced that it cancelled its contract with the previously selected dredging contractor. If MES intends to issue another Request for Proposals to select a new contractor for the Pilot Project, that process would likely take

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<sup>36</sup> Application at 68-69.



numerous months. If MES no longer anticipates being able to meet its original timeline, MES will need to reinitiate consultation with the various resource agencies to confirm that their conclusions regarding potential adverse impacts to rare, threatened, and endangered species remain valid.

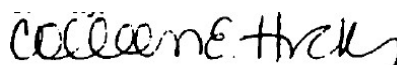
### ***Conclusion***

The Application is facially deficient, failing to provide crucial details regarding the proposed Pilot Project or adequately address the potential environmental and navigational impacts that will result from the Pilot Project. MDE should not grant the Application until MES addresses these deficiencies. Given the scope of the Pilot Project, MES also should seek an individual permit from the Corps under CWA section 404<sup>37</sup> and section 10 of the Rivers and Harbors Act of 1899.<sup>38</sup>

In addition, Exelon does not agree with MES' repeated assertions that the Pilot Project, if successful, will demonstrate the feasibility of a large-scale dredging project. The Pilot Project would not even demonstrate the feasibility of a similar size operation in a location that is more representative of the majority of the Maryland part of Conowingo Pond. MES chose the location with the best possible sediment composition for potential beneficial reuse and the least possible logistical and environmental concerns. The Pilot Project therefore will: (1) overestimate the likelihood that a large-scale dredging project would succeed, (2) fail to identify logistical considerations of any large-scale dredging project; and (3) grossly underestimate the potential environmental impacts that would result from such a project. Moreover, the Pilot Project does not measure many potential environmental impacts and does not provide any data at all regarding any assumed environmental benefit.

Please do not hesitate to contact the undersigned if you have any questions or require additional information regarding this matter.

Sincerely,



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<sup>37</sup> 33 U.S.C. § 1344.

<sup>38</sup> *Id.* § 403.

## **ATTACHMENT A**



April 5, 2018

Ms. Melissa Slatnick  
Environmental Section Chief, Environmental Dredging and Restoration  
Maryland Environmental Service  
259 Najoles Road  
Millersville, MD 21108

RE: Draft JPA and Draft Environmental Assessment of Maryland Environmental Service  
Pilot Dredging Project

Dear Ms. Slatnick:

Exelon Generation Company, LLC ("Exelon"), the owner and operator of the Conowingo Hydroelectric Project ("Conowingo Project"), appreciates the opportunity to provide comments to Maryland Environmental Service's ("MES") draft JPA for the pilot dredging at the Conowingo Pond. As we have discussed<sup>1</sup>, Exelon holds a hydropower license from the Federal Energy Regulatory Commission ("FERC") for the Conowingo Project, and any proposed non-project use at the Conowingo Project, such as the proposed pilot dredging project, requires approval from the FERC. Exelon also holds a license from the FERC for its Muddy Run Pumped Storage Project ("Muddy Run Project"), which utilizes the Conowingo Pond as its lower reservoir. Exelon's comments below identify potential items for consideration in the Joint USACE Application and to the application to the FERC of the pilot dredging program at the Conowingo Project.

We understand that the purpose of the pilot project is to dredge approximately 25,000 cubic yards of sediment from the Conowingo Pond for the purpose of determining (1) if dredging is technically feasible if scaled up to address the entire pond and (2) if the dredged material can be beneficially reused or innovatively used within the State of Maryland, without addressing if there would be a market for the volume expected to result from a pond-sized dredging operation. The application filed by MES should affirmatively state that the scope of the pilot project is not to restore water capacity of the Conowingo Reservoir. The Conowingo Project's usable storage is not impacted by reservoir sedimentation. As was discussed when we met in August 2017 and as agreed to by FERC representatives, MES will file for the Non-Project Use of Project Lands and Waters approval from the FERC. References in the draft Environmental Assessment ("EA") having Exelon filing the application for the Pilot Dredging Project should be removed and replaced with MES as the filing party. Please note that shortly we shall be submitting to you additional comments on the EA, some of which may overlap the comments expressed herein.

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<sup>1</sup> Exelon representatives met with MES, MDE, US Army Corp and FERC to discuss the project in August 28, 2017, and have continued to be in discussions with MES project representatives since August.

### ***Potential Environmental Impacts***

- Exelon operates the Conowingo Project in accordance with a FERC-approved Bald Eagle Management Plan. Given the activity of Bald Eagles in the area of the proposed staging area and dredging site, it is possible that new nests and roost sites may have been created and may exist closer to the proposed dredging and staging areas. Given the construction necessary for the dewatering operation, required tree clearing and operation of the dredge itself, it is possible that the project may have an effect on nesting eagles. Therefore, we recommend that the FERC application for the pilot dredging proposal address any potential impacts to bald eagles and detail how the proposal will comply with the Bald Eagle Management Plan.
- The Final Environmental Impact Statement issued by the FERC in the relicensing proceedings for the Muddy Run and Conowingo Projects<sup>2</sup> determined that suitable habitat for the Northern long-eared bat, a federally-listed threatened species, may exist within the project boundary. Based upon consultation with the U.S. Fish and Wildlife Service (“USFWS”), FERC has recommended restrictions on tree clearing activities that may affect the bats. The FERC recommended that that any license issued for the Conowingo Project include a requirement that tree clearing (i.e., removal of all trees greater than 5 inches in diameter at breast height) only occur during the winter season (between November 1 and March 31) when bats are hibernating and less likely to be present. We recommend that MES consult with USFWS regarding its proposal prior to filing its application with FERC.
- Surveys for bog turtles and Indiana bats, which are both federally-listed endangered species, may also be required for any proposed activity within the vicinity of the Conowingo Project. Towson University researchers have documented the occurrence along Broad Creek of the Northern map turtle, a Maryland state-listed endangered species found only in the lower Susquehanna River and its tributaries in Maryland. Broad Creek is located within the vicinity of some of the proposed dredge staging areas and consideration of impacts to the Northern map turtle, if any, should be addressed in the FERC application.
- Booster pump information should be supplied with respect to number of pumps, locations, and size. The booster pump(s) may be placed near cottages that have leases with Exelon. Noise may be an issue with cottage owners due to the proximity of pipelines and booster pump(s). Also, the booster (s) should have secondary containment to ensure no oil and/or fuel enters the ground or water. It is not clear if an air permit is needed for the booster pumps. Due to the remote locations of the two potential pipeline routes, a fuel delivery method, associated containment, and spill equipment should be identified.
- Dredging and dewatering via settling have been associated with changes to ambient conditions which may affect the exchange of chemical constituents in the sediment, pore water, and water column. Exelon recommends that the draft Environmental Assessment submitted with the FERC application include a discussion on proposed measures to address methods to control those

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<sup>2</sup> <https://www.ferc.gov/industries/hydropower/enviro/eis/2015/03-11-15.asp>

contaminants. Similarly, the application should address the methods to abate (1) the release from the sediment of adsorbed ammonium as the addition of water for sediment slurring occurs, and (2) the release of ammonia gas into the atmosphere. Exelon is also concerned about potential of soluble reactive phosphorus binding to iron oxide minerals formed during dredging and being released into the water column. Accordingly, the application should contain a discussion of these matters.

### ***Potential Operational Impacts***

- Exelon recommends that when the FERC application is submitted, it addresses communications and other protocols between Exelon and MES (and its contractor) to avoid any interference with hydroelectric generation and other activities at the Conowingo Project. Exelon is available to assist in the development of these protocols.
- There are underwater hazards in Conowingo Pond, including co-located electric and natural gas infrastructure. Dredging activities may also affect public water supply and cooling water intake withdrawals at Conowingo Pond. Exelon recommends that MES coordinate with potentially affected utilities and other infrastructure owners. Exelon also recommends that the FERC application discuss proposed mitigation measures for addressing any impacts to co-located infrastructure. Potentially affected parties include the Chester Water Authority, the City of Baltimore, Energy Capital Partners, LLC,<sup>3</sup> Old Dominion Electric Cooperative, and Peach Bottom Atomic Power Station. Of these five entities, Chester Water Authority and Old Dominion Electric Cooperative may have a heightened interest inasmuch as they operate water withdrawal facilities in close proximity to the proposed dredging area.
- The application to the FERC for the pilot dredging program should provide drawings on approved maps of the Conowingo Project depicting the location of the dredging facilities and the water withdrawal facilities of the Chester Water Authority and Old Dominion Electric Cooperative.
- Limitations on the time frames during which the dredging activities can be carried out are required given Exelon's obligations under the Conowingo and Muddy Run Project licenses to undertake fish passage measures and related studies. It is our understanding that dredging may begin in June or July 2018 provided that all local, state, and Federal approvals have been received. The Muddy Run Project and Holtwood Dam have spring American shad studies that will be completed in June 2018. Depending upon the schedule for the pilot dredging project, further time-of-year restrictions may be required in the fall of 2018 or at other times to avoid interference with the studies required under the Muddy Run Project license or conditions imposed or required studies associated with the operation of the Peach Bottom Atomic Power Station.
- On February 5, 2018, the US Department of the Interior Fish and Wildlife Service (USFWS) provided a letter on behalf of the Susquehanna River Anadromous Fish Restoration Cooperative noting several upstream and downstream American shad studies that will be conducted at both

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<sup>3</sup> Energy Capital Partners, LLC recently became the owner of the York Energy Center previously owned by Calpine Corporation through one of its subsidiaries.

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Holtwood Dam and the Muddy Run Project. USFWS noted concern with the pilot dredging project if the project were to start earlier than noted in your schedule and requested that a copy of this letter be provided to it.

- We understand that contractors and other personnel working on the pilot dredging project will be required to receive safety training from MES. Exelon requests that a representative from the Conowingo Project attend all pre-job briefings.
- The FERC application should address how the pilot dredging project will comply with the permits and authorizations the project requires and how MES will ensure that no violations of environmental law or regulations will occur as a result of the project, including from dredging operations and the handling and storage of dredged materials.
- We recommend that MES provide the FERC with all permits, drawings, and consultation information as they are received or completed. Copies should also be provided to Exelon.

### ***Other Approvals***

- The U.S. Army Corps of Engineers (“USACE”) and the Maryland the Department of Environment regulate dredging activities in the waters of the United States. A permit will be required from the USACE to satisfy the requirements under Section 404 of the Clean Water Act and a Non-Tidal Wetlands and Waterway/Floodplain permit will be required from MDE.
- The Susquehanna River Basin Commission (“SRBC”) is a federal-interstate compact commission that has jurisdiction to review certain projects affecting the Susquehanna River. Further, pursuant to 18 CFR § 806.5 (2017), the SRBC may review projects that affect interstate water quality which may be a possibility because of the project’s proximity to the Maryland/Pennsylvania border. If ponds are used to dewater the sediment, a consumptive use permit may be required if the pond evaporation averages more than 20,000 gallons per day in any consecutive 30-day period. In summary, the pilot dredging proposal may require SRBC approval depending upon the scope and parameters of the proposal.
- Because ground disturbance exceeds one acre, MES will need to apply to MDE for an NPDES Construction Permit and approval of the project’s Stormwater Management Plan. Grading and stormwater permits will also be required from Harford County since the ground disturbance exceeds 5,000 ft<sup>2</sup>.
- If the dewatering process involves the discharge of return water back to the Susquehanna River, a NPDES discharge permit may be required from the MDE.
- The wetland delineation for the project was done in December 2017 and January 2018 when the ground was frozen and few plants were present for identification. While winter delineations have been accepted by the Baltimore District of the USACE, winter is not the best time of year for

performing delineations. The existence of wetlands in or near the area of disturbance has importance not only for USACE and MDE permitting, but also because northern Harford County is within the range of the state- and federally-listed Bog Turtle, which could potentially occur in any wetlands. In addition, the wetland delineation report does not provide data sheets, photographs, or other information to support the findings that there are no wetlands within the project area. We recommend that the impacts to wetlands be studied further and be included in the FERC application.

### ***Other Concerns***

- We understand that the five-acre Staging Area where the dredged material will have its final disposal is a property that adjoins Exelon's property. We are concerned that the dredged material may runoff the Staging Area onto Exelon's property and need assurances that appropriate erosion and sediment control measures are being taken to prevent such events. As you can understand, 25,000 cubic yards of loose, wet material placed on land has a great potential to move during rain events. Also, be aware, that both Harford County and the Harford Soil and Conservation District will need to approve the Erosion and Sedimentation Plans for the project.
- Harford County has Forest and Tree Conservation ordinances (see Harford Co. Code Sec. 267-34 through 267-48) that require reforestation and warranties for the trees and growth of the forest. We think it is important that MES comply with such requirements as they apply to the Staging Area so that there will be more permanent stability for the land covered by the dredged material to prevent sediment runoff.
- Recreation – a small number of cottages that have leases with Exelon are in the area of the two proposed pipeline routes. The pipeline crossing should be identified and safe crossing made since some of the cottage owners hike to their cottages. In addition, it is our understanding that the pipeline will float from the dredging barge to the land. This will be during a time when boaters use the pond. The floating pipeline should be identified with buoys, lights, and other navigational aids to ensure that the boaters can avoid the pipeline both at night and during the day.
- The dredging operation with its booster pumps and dewatering operation will result in an increased noise. We recommend that the application to the FERC discuss noise and how it will be mitigated to avoid adverse impacts.
- Sediment Contamination Assessment – Maryland Geological Survey's Coastal and Environmental Geology File Report No. 17-13 does not fully document the sampling procedures and, as such, questions could be raised about the validity of these data. For example, per the MDE Innovative Reuse and Beneficial Use Dredged Material Guidance Document, the suggested number of analytical samples needed to evaluate 25,000 CY of dredged fill would be 32 samples. Only 12 samples are presented in Geological Survey's Coastal and Environmental Geology File Report No. 17-13. Analytical protocols also require QA/QC samples i.e., duplicate samples and trip blanks and none are reported. The report also doesn't include documentation on sample preservation or chain-of-custody protocols which raise questions on whether the samples were preserved satisfactorily prior to testing. We recommend that these discrepancies be resolved in the FERC application.

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- To be in compliance with Article 13 of the license for the Conowingo Project, MES must provide a statement in its application as to the relationship of the project to any State or municipal plans or orders which may have been adopted with respect to the use of the Conowingo Pond. Further, the application must contain a showing that an archeological or historic sites survey has been performed for the area impacted by the pilot project.
- The application MES files with the FERC must contain a statement acknowledging on behalf of the State of Maryland that the lands waters of the Conowingo Project are part of a project licensed pursuant to a license issued by the FERC and use of such lands and waters, such as the pilot project, is subject to the requirements of that license. Further, MES must state that it commits to take all reasonable precautions to ensure that the construction, operation, use, and maintenance of its dredging facilities on such lands and waters will occur in a manner that protects the scenic, cultural, recreational, and environmental values of the Conowingo Project and will be consistent with rules and regulations of the FERC and the requirements and plans contained in the license for the Conowingo Project, including the obligations imposed by Order No. 313 issued by the Federal Power Commission on December 27, 1965, *Recreational Development at Licensed Projects*, 34 F.P.C. 1546 (1965).

Exelon appreciates the opportunity to provide these comments concerning the pilot project. We should note however that in the event that MES would seek authorization to proceed with a full scale dredging program, the environmental review conducted for the pilot project would be inadequate in determining the environmental and operational impacts of such a major and continuing operation on the lands and waters of the Conowingo Project.

We look forward to continuing to work with MES as it prepares its FERC application. Please do not hesitate to contact me if you need additional information in support of the pilot dredging program. Exelon reserves the right to comment on the applications when published for public comment. If you have any questions, please contact me at (267)533-1125 or [andrea.danucalov@exeloncorp.com](mailto:andrea.danucalov@exeloncorp.com).

Sincerely,



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cc: USFWS