
CONOWINGO DAM WATER QUALITY SETTLEMENT AGREEMENT

by and between

STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT

and

CONSTELLATION ENERGY GENERATION, LLC

and

WATERKEEPERS CHESAPEAKE

and

LOWER SUSQUEHANNA RIVERKEEPER ASSOCIATION

Dated September 26, 2025

FERC Project No. P-405 MDE WSA Application No. 17-WQC-02

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Attachments:

- A Form of Revised Certification
- B Form of Acknowledgement of Payment Operative Date

CONOWINGO DAM WATER QUALITY SETTLEMENT AGREEMENT

- THIS CONOWINGO DAM WATER QUALITY SETTLEMENT AGREEMENT (this "Agreement") is made as of September 26, 2025 (the "Settlement Date") by and between the STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT ("MDE"), CONSTELLATION ENERGY GENERATION, LLC, a Pennsylvania limited liability company (formerly known as Exelon Generation Company, LLC) ("Constellation"), and WATERKEEPERS CHESAPEAKE and LOWER SUSQUEHANNA RIVERKEEPER ASSOCIATION ("Waterkeepers" and, together with MDE and Constellation, the "Parties").
- **WHEREAS**, Constellation owns and operates the Conowingo Hydroelectric Project, which bears Federal Energy Regulatory Commission ("FERC") Project Number P-405 (the "Project");
- **WHEREAS**, Constellation submitted an Application for New License for Major Water Power Project-Existing Dam to FERC on or about August 9, 2012 (as amended, supplemented, or modified, the "FERC Application"), seeking a new license from FERC for the Project (the "New License"), under FERC Project Number P-405-106 (collectively, the "FERC Relicensing Proceeding");
- WHEREAS, on April 27, 2018, MDE issued a water quality certification for the Project (the "Certification") pursuant to Section 401 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §1341 et seq. (the "CWA"), Title 9, Subtitle 3 of the Environment Article of the Annotated Code of Maryland, and Chapter 26.08.02 of the Code of Maryland Regulations;
- **WHEREAS**, on or about May 25, 2018, Constellation submitted to MDE a Protective Petition for Reconsideration and Administrative Appeal, seeking an administrative reconsideration and appeal of the Certification (the "Constellation Administrative Proceeding");
- WHEREAS, on or about June 8, 2018, Waterkeepers submitted to MDE an Administrative Appeal of Final Decision To Issue Clean Water Act Section 401 Certification for the Conowingo Hydroelectric Project, seeking an administrative reconsideration of the Certification (the "Waterkeepers Administrative Proceeding," and together with the Constellation Administrative Proceeding, the "Reconsideration");
- **WHEREAS**, on or about May 25, 2018, Constellation filed a lawsuit challenging the Certification in the Circuit Court for Baltimore City, Maryland, styled as *Exelon Generation Company, LLC v. Maryland Department of the Environment*, case number 24-C-18-003410 (the "State Lawsuit");
- **WHEREAS**, the State Lawsuit was dismissed on October 9, 2018, which dismissal Constellation appealed to the Appellate Court of Maryland in case number 2908, September Term 2018 (the "State Appeal");
- **WHEREAS**, on or about May 25, 2018, Constellation filed a lawsuit challenging the Certification in the United States District Court for the District of Columbia, styled as *Exelon Generation Co. v. Grumbles, et al.*, case number 1:18-cv-01224 (the "Federal Lawsuit");

WHEREAS, on or about February 28, 2019, Constellation filed a petition for declaratory order challenging the Certification with FERC, under FERC Project Number P-405-121 (the "FERC Declaratory Action");

WHEREAS, on October 29, 2019, while MDE was conducting the Reconsideration process (including receipt of briefs and oral argument by the parties), MDE and Constellation entered into a comprehensive settlement agreement that included proposed license articles that would be implemented under the following process: MDE and Constellation agreed to jointly submit to FERC an offer of settlement with proposed license articles, pursuant to which, if FERC approved the offer of settlement and incorporated all of the proposed license articles into a new license without modification, the State of Maryland would conditionally waive its right to issue a CWA Section 401 certification in connection with the license, and Constellation would dismiss the State Appeal, the Federal Lawsuit, and the FERC Declaratory Action or they would be deemed moot (the "2019 Settlement Agreement");

WHEREAS, on or about March 19, 2021, FERC issued an "Order Issuing New License" for the Project, which license incorporated the proposed license articles of the 2019 Settlement Agreement without material change (the "2021 License"), and as a result the challenges to the Certification identified above were either dismissed or deemed moot as of that time;

WHEREAS, on or about December 20, 2022, in connection with a petition for review of the 2021 License filed by Waterkeepers, styled as *Waterkeepers Chesapeake*, et al. v. FERC, No. 21-1139 (the "2021 License Appeal"), the U.S. Court of Appeals for the D.C. Circuit issued a decision vacating the 2021 License, and concluding that MDE's conditional waiver was ineffective and that the administrative review of the Certification that was interrupted by the 2019 Settlement must continue;

WHEREAS, as a result of the decision in the 2021 License Appeal, Reconsideration of the Certification has resumed, and MDE must make a decision on Reconsideration to invalidate the Certification, affirm the Certification, or revise the Certification;

WHEREAS, to avoid the expense and uncertainty of protracted litigation, and to accelerate the pace of environmental improvements at the Project, the Parties have agreed to enter into this Agreement, in which the Parties shall resolve their disputes relating to the Project, on the terms and conditions set forth herein, and in which the Parties shall refrain from re-initiating any challenges to the Certification and support MDE's issuance of a revised water quality certification for the Project, attached hereto, as its decision on Reconsideration (the "Revised Certification"); and

WHEREAS, MDE has determined that this Agreement is in the best interests of and will benefit water quality in the Chesapeake Bay and its tributaries and the citizens of the State of Maryland.

NOW THEREFORE, in consideration of the foregoing recitals (which are incorporated into and made a part of this Agreement) and other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the Parties agree as follows:

1. Definitions and Interpretive Provisions

1.1 <u>Definitions</u>. As used herein, the following capitalized terms have the respective meanings set forth below:

"2021 License" has the meaning provided in the recitals of this Agreement.

"2021 License Appeal" has the meaning provided in the recitals of this Agreement.

"2019 Settlement Agreement" has the meaning provided in the recitals of this Agreement.

"Affiliate" means, with respect to Constellation, each and every Person directly or indirectly controlling, controlled by, or under common control with Constellation, where "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.

"Agreement" has the meaning provided in the preamble of this Agreement.

"Approval" means any applicable license, permit, approval, consent, exemption or authorization of any Person.

"Business Day" means any day other than Saturday, Sunday, or a day on which offices of the government of the State of Maryland are closed.

"CAST" has the meaning provided in Section 2.5(b)(4)(ii).

"Certification" has the meaning provided in the recitals of this Agreement.

"Challenge" has the meaning provided in Section 4.1.

"Claimant" has the meaning provided in Section 8.6(a).

"Clean Water Fund" means the Maryland Clean Water Fund, created pursuant to Md. Code Ann., Environment § 9-320.

"Constellation" has the meaning provided in the preamble of this Agreement.

"Constellation Administrative Proceeding" has the meaning provided in the recitals of this Agreement.

"CPI" means the Consumer Price Index for All Urban Consumers (CPI-U; U.S. City Average; all items, not seasonally adjusted; 1982-84=100 reference base) published from time to time by the U.S. Bureau of Labor Statistics. Any amounts in this Agreement adjusted for inflation in accordance with the CPI shall be based on the cumulative change in CPI.

"CWA" has the meaning provided in the recitals of this Agreement.

- "Dam" means the Conowingo Dam.
- "Dispute" has the meaning provided in Section 8.6(a).
- "Dispute Notice" has the meaning provided in Section 8.6(a).
- "Maryland DNR" means the Maryland Department of Natural Resources.
- "DOI Settlement Agreement" has the meaning provided in Section 3.4.
- "Dredge Reserve Funds" has the meaning provided in 2.5(b)(1).
- "Effective Date" means the effective date of the New License.
- "FERC" has the meaning provided in the recitals of this Agreement.
- "FERC Application" has the meaning provided in the recitals of this Agreement.
- "FERC Declaratory Action" has the meaning provided in the recitals of this Agreement.
- "FERC Relicensing Proceeding" has the meaning provided in the recitals of this Agreement.
 - "Federal Lawsuit" has the meaning provided in the recitals of this Agreement.
- "Fish Passage Prescription" means DOI's Modified Prescription for Fishways Pursuant to Section 18 of the Federal Power Act for the Project, dated June 8, 2016.
- "Government Entity" means any federal, state, or local government, political subdivision thereof, or any department, agency, authority, unit, or other entity thereof.
- "Holtwood" means the Holtwood Hydroelectric Project, FERC Project Number 1881.
- "Laws" means applicable laws, statutes, regulations, rules, administrative orders, and judicial orders.
 - "MDE" has the meaning provided in the preamble of this Agreement.
- "Muddy Run" means the Muddy Run Pumped Storage Project, FERC Project Number 2355.
 - "New License" has the meaning provided in the recitals of this Agreement.
 - "Parties" has the meaning provided in the preamble of this Agreement.
- "Payment Operative Date" has the same meaning as set forth in the definitions of the Revised Certification.

"Peach Bottom" means the Peach Bottom Atomic Power Station, U.S. Nuclear Regulatory Commission License Numbers DPR-44 and DPR-56.

"Person" means any individual, corporation, limited liability company, partnership, trust, association, Government Entity, or other entity.

"Project" has the meaning provided in the recitals of this Agreement.

"Reservoir" means the water impounded by the Dam, which is sometimes referred to as the Conowingo Pond or Conowingo Pool.

"Revised Certification" has the meaning provided in the recitals of this Agreement.

"River" means the Susquehanna River.

"Safe Harbor" means the Safe Harbor Hydroelectric Project, FERC Project Number 1025.

"Settlement Date" has the meaning provided in the preamble of this Agreement.

"State Appeal" has the meaning provided in the recitals of this Agreement.

"State Lawsuit" has the meaning provided in the recitals of this Agreement.

"Term" has the meaning provided in Section 8.1.

"USACE Modeling Study" has the meaning provided in Section 2.5(b)(4).

"Water Quality Mitigation Funds" has the meaning provided in Section 2.4(a).

"Waterkeepers" has the meaning provided in the recitals of this Agreement.

"Waterkeepers Administrative Proceeding" has the meaning provided in the recitals of this Agreement.

Attachments are references to Sections of or Attachments to this Agreement, unless otherwise indicated. All Attachments to this Agreement are deemed to be incorporated by reference and made a part of this Agreement. All documents incorporated by reference into this Agreement that are not attached hereto are qualified by the provisions, requirements, and conditions of this Agreement. Whenever the words "include," "includes," or "including" are used in this Agreement, they shall be deemed to be followed by the words "without limitation." The Table of Contents and Section headings contained in this Agreement (including the Attachments hereto and documents incorporated herein by reference) are for convenience only and shall not in any way affect the meaning or interpretation of this Agreement. All references herein to "days" are calendar days unless otherwise noted. All references herein to Government Entities are to such Government Entities and any successor(s) thereto.

2. ENVIRONMENTAL BENEFIT OBLIGATIONS

- 2.1 Payments, Generally. Unless otherwise specified herein, all payments Constellation is required to make pursuant to the Revised Certification shall be made in accordance with such written payment instructions as MDE shall provide to Constellation from time to time. Where the Revised Certification requires Constellation to make payments to a particular State governmental fund or payee, MDE may designate a different fund or payee in its sole discretion from time to time by giving written notice of such designation to Constellation. Neither MDE nor any other payee shall have any obligation to submit invoices to Constellation for payments required by this Agreement. As between MDE and the other Parties, MDE shall have the sole right to determine how funds paid by Constellation under the Revised Certification are utilized. Payments made by Constellation under the Revised Certification are not being made in relation to the violation of any law or the investigation or inquiry into the potential violation of any law.
- **2.2** Acknowledgment of Payments Received. Under the 2019 Settlement Agreement, Constellation agreed to pay MDE certain amounts towards water quality and other resiliency projects as well as reimbursement costs, and MDE acknowledges that Constellation has made certain of those payments, as reflected in Table I below, which total \$6.3 million. Constellation agrees that MDE may retain these funds. However, retention of those funds does not serve as credit to Constellation's obligations to make payments under this Agreement or Conditions 9 and 12 of the Revised Certification.

2019 Settlement Agreement Payments Received Table I			
Payment Received	<u>Subject</u>	2019 Settlement Term	
\$2,000,000	Mussel Restoration	2.2(a)(1)	
\$500,000	Resiliency Projects	2.3(a)(1)	
\$250,000	Scour Mitigation	2.3(b)	
\$1,500,000	Water Quality Projects	2.4(a)(1)	
\$1,000,000	Eel Passage Research	2.4(b)	
\$500,000	Sediment Disposal Study	2.4(c)	
\$250,000	Litigation Expense Reimbursement	2.4(d)	
\$300,000	Oversight Cost Reimbursement	2.5(f)	

2.3 Mussel Restoration.

- (a) MDE intends to use the payments made by Constellation pursuant to Condition 9 of the Revised Certification to implement mussel restoration projects, provided that the funds remain available and have been appropriated through the State budget to be expended for that purpose, as follows:
- (1) MDE intends to utilize the mussel restoration mitigation payment for mussel restoration for the Susquehanna River Basin;
- (2) MDE intends that funds will assist in preparation of mussel restoration stocking, monitoring, propagation planning and coordination, including annual reporting;
- (3) MDE intends that funds will support a mobile mussel propagation trailer, mussel propagation, and restoration activities, including research and public outreach and education;
- (4) MDE intends to conduct outreach, solicit input, and seek out active partners to support improvements to build a fully functional freshwater mussel hatchery on the Maryland DNR-owned Joseph Manning Hatchery (Brandywine, Maryland), to include a hatchery building, culture ponds, and all associated equipment and services required for operation of the hatchery, as necessary, to implement the mussel restoration plans for the Susquehanna River Basin; and
- (5) MDE agrees to conduct an annual public meeting to review the previous year's work and mussel restoration activities, and to take comments on survey, stocking, and monitoring plans for the upcoming year.
- (b) MDE reserves the right to use payments made by Constellation pursuant to Condition 9 of the Revised Certification as may be appropriate for the implementation of other water quality and resiliency improvement projects designed to benefit the River and the Chesapeake Bay.

2.4 Water Quality Mitigation Payments.

- (a) Subject to Section 2.5, MDE intends to use the water quality mitigation payments made by Constellation pursuant to Condition 12 of the Revised Certification (the "Water Quality Mitigation Funds") for the implementation of water quality and resiliency improvement projects designed to benefit the River and the Chesapeake Bay, provided that the funds remain available and have been appropriated through the State budget to be expended for that purpose.
- (b) MDE agrees to consult with the Waterkeepers and Constellation in the development, revision, and implementation of a ranking system for projects funded by the Water Quality Mitigation Funds that will consider certain criteria, including:
- (1) Lowest cost dollar per pound of nitrogen or other pollutants removed and provided by an approved Chesapeake Bay Program best management practice with

due regard for known co-benefits of each practice;

- (2) Location within the River watershed in Maryland Counties (Harford and Cecil);
 - (3) Innovative and beneficial reuse of dredge material;
 - (4) Trash and debris removal;
 - (5) Floodplain management; and
- (6) Aquatic life passage, including small dam removal, or habitat restoration.
- (c) To the extent that projects approved by MDE under this Section and Condition 12 of the Revised Certification are implemented by other parties not affiliated with Constellation, Constellation shall not be responsible for the design, implementation, operation, or maintenance of the projects funded from the mitigation payments.

2.5 <u>Dredging</u>.

- (a) **Definitions**. For the purposes of this Section, the following definitions apply:
 - (1) "Dredging-Related Activities" includes:
- (i) activities related to the evaluation and study of dredging for the purpose of any modeling or environmental reviews required or necessary for feasibility analyses, governmental approvals, and best management practices review, including analysis of the potential beneficial or adverse effects of dredging with respect to water quality in the River and the Chesapeake Bay;
- (ii) activities related to the design of dredging, including identification of infrastructure needs and specifications for dredging;
- (iii) activities related to the building, operation, or maintenance of any infrastructure for collection, transport, storage, sale, innovative or beneficial reuse, and disposal of any dredged material; and
- (iv) activities related to materials management, which includes treatment, separation, and dewatering activities.
- (2) "Dredging" means a dredging project for the purpose of increasing the capacity of the Reservoir to store sediments or reducing or mitigating the impacts of sediment scouring during high River flow events.

(b) Dredge Reserve Funds.

Certification for the implementation of water quality and resiliency improvement projects and Dredging Related Activities designed to benefit the River and the Chesapeake Bay, provided that the funds remain available and have been appropriated through the State budget to be expended for that purpose. Furthermore, MDE intends to reserve funds in Condition 12 of the Revised Certification in accordance with the schedule in Table II below, adjusted in accordance with CPI, for the express purpose and support of Dredging and Dredging-Related Activities, provided that the funds remain available and have been appropriated through the State budget to be expended for that purpose (the "Dredge Reserve Funds").

Water Quality Mitigation Payment Dredge Reserve Funds Table II			
Year	Amount (Annual)		
1-5	\$415,000		
6-25	\$715,000		

- (2) Constellation may reduce the payment required by Condition 12 of the Revised Certification up to a cap of One Hundred and Fifty Thousand Dollars (\$150,000) annually, adjusted in accordance with CPI, for reasonable costs incurred in the prior year associated with Dredging-Related Activities or Dredging. To the extent Constellation seeks to reduce the payment required by Condition 12 of the Revised Certification pursuant to this paragraph, it shall provide notification to MDE and Waterkeepers ninety (90) days prior to the payment due date. The notification shall include a summary documenting the reasonable costs incurred during the prior year.
- (3) The Dredge Reserve Funds in Table II are intended to be used for Dredging-Related Activities or Dredging, subject to the qualifications in subsection (b)(4) below. The annual Dredge Reserve Funds may, at any time, be supplemented by MDE by using other Water Quality Mitigation Funds previously paid by Constellation or any other funding source appropriated for the furtherance of Dredging and Dredging-Related Activities.
- (4) Upon completion of the United States Army Corps of Engineers Conowingo Reservoir Modeling Study (the "USACE Modeling Study") currently underway in cooperation with MDE, MDE shall determine, following consultations with Constellation and Waterkeepers, whether the USACE Modeling Study supports Dredging as a potential mitigation measure or further investigation of the economic feasibility and environmental effects and benefits of Dredging. MDE thereafter may, but is not required or limited to, use the Dredge Reserve Funds to support the following actions:

- (i) study and evaluation of the potential beneficial or adverse effects of Dredging and economic feasibility of Dredging;
- (ii) development, support, and formation of an Expert Panel through the Chesapeake Bay Partnership to investigate establishment of a crediting protocol for Dredging and eventual inclusion into the Chesapeake Assessment and Scenario Tool ("CAST") model or other model utilized by the Chesapeake Bay Program in conjunction with CAST or to supplement or replace CAST; and
- (iii) completion of environmental studies, analyses, and modeling necessary to support regulatory permitting decisions for Dredging or Dredging-Related Activities.
- (5) Upon MDE's determination that Dredging should proceed based on considerations reasonably determined to be appropriate by MDE, such as economic feasibility, CAST model inclusion, creditable best management practice development, and environmental benefit with minimal adverse impact to the aquatic environment and ecosystem and water quality, MDE will continue utilizing the Dredge Reserve Funds in Table II to further Dredging and Dredging-Related Activities as may be undertaken in the future.
- (6) Upon a determination by MDE that Dredging should not proceed at the conclusion of the items in Section 2.5(b)(4) and (5) above and after consultation with Constellation and Waterkeepers, MDE shall utilize the Dredge Reserve Funds for other projects as outlined in Section 2.4 and Condition 12 of the Revised Certification.

(c) Access for Dredging and Dredging-Related Activities.

- (1) Constellation will allow reasonable access to lands and waters within the FERC-approved Project boundary and other land owned by Constellation reasonably necessary to the evaluation, study, and/or modeling of the potential benefits and feasibility of Dredging to enhance water quality downstream of Conowingo Dam, and for seeking and obtaining any required permit, license, or other governmental authorization for such actions and Dredging-Related Activities, and for Dredging, which includes activities for the collection, treatment, transport, disposal, storage, or sale of dredged material, as may be undertaken in the future, subject to subparagraphs (c)(2)-(4), (d), and (e) below. Constellation will assist in making a filing at FERC, if necessary, of an application prepared by other parties involved in Dredging or Dredging-Related Activities for a non-Project use of lands and waters within the FERC-approved Project boundary.
- (2) Constellation shall determine, in the exercise of its reasonable judgment, the type of access to be granted and the form of agreement to provide such access. Constellation may consider legal and regulatory obligations, safety and operational issues at the Project, Muddy Run, Peach Bottom, its recreational sites, and other facilities in approving, granting, conditioning, or accommodating such access requests.
- (3) Constellation shall not assume any liability for Dredging-Related Activities or Dredging, and the granting of access and performance of cooperation under these

provisions shall not give rise to such liability.

- (4) In granting access, Constellation may require reasonable indemnification and other appropriate contractual terms and conditions against any losses or liabilities for activities identified in this provision.
- (d) Other Authorizations. In addition to the MDE determinations required to be made under this Section, the commencement of any Dredging or Dredging-Related Activities remain contingent upon receipt of all appropriate governmental authorizations and shall, at a minimum, be coordinated with Constellation to ensure against interference with Project operations or the operations of Muddy Run or Peach Bottom and to ensure that activities do not pose a threat to the safety of personnel working at the Project.
- (e) No Assumption of Liability. Constellation shall not assume any liability for Dredging or Dredging-Related Activities conducted as part of this Agreement and the performance of cooperation required hereunder shall not give rise to such liability. Constellation may require indemnification and other appropriate contractual terms and conditions against any losses or liabilities resulting from the use of lands and waters within the FERC-approved Project boundary by third parties for Dredging-Related Activities or Dredging.

(f) Further Evaluation and Support.

- (1) Constellation and Waterkeepers may participate in working groups that involve MDE and/or Maryland DNR that are convened to assess or determine the scope of any further evaluation, study, and/or modeling of the potential benefits and feasibility of Dredging to enhance water quality downstream of the Dam.
- (2) The Parties to this Agreement recognize that for any Dredging and Dredging-Related Activities to occur it may be necessary for the State of Maryland to provide significant state funding. Nothing in this Agreement obligates the State of Maryland to provide such funding.

2.6 Financial Support for Other Projects.

(a) Tailrace Gage Funding. Until such time as the re-design and installation of best available real-time flow telemetry at the stream gage is determined to be feasible per Condition 4 (b) in the Revised Certification and completed, Constellation shall continue to provide funding to the Maryland Geological Survey or the United States Geological Survey for the existing Tailrace gage (USGS #01578310), up to Twenty Thousand, Two Hundred and Eighty Five Dollars (\$20,285) per year; provided, that the foregoing maximum amount shall be adjusted for inflation on July 1 of each year thereafter, based on the cumulative change in the CPI.

(b) Water Quality Model Development Payment.

(1) No later than one year after submittal of the final report on Chlorophyll-A and DO Monitoring required in Condition 13(d)(ii) of the Revised Certification, Constellation shall make a payment to MDE in the amount of One Hundred Thousand Dollars

(\$100,000), adjusted for inflation based on the cumulative change in the CPI from the date of the issuance of the New License, to be deposited into the Maryland Clean Water Fund. MDE intends to use the funds for development of a Water Quality Model for potential TMDL development based on the water quality findings, provided that the funds remain available and have been appropriated through the State budget to be expended for that purpose.

(2) Constellation reserves all rights with regard to Chlorophyll-A, including as set forth in Section 2.8 below.

2.7 Cooperation.

- (a) Cooperation. Constellation shall provide reasonable cooperation with activities undertaken or proposed to be undertaken by MDE and other resource agencies on Conowingo Project lands in connection with this Agreement or the Revised Certification, including the mussel restoration and water quality and resiliency improvement projects contemplated by Sections 2.3, 2.4, and 2.5. MDE or its designee shall be responsible for obtaining all Approvals of Government Entities necessary for such activities, but Constellation shall provide reasonable cooperation to MDE in connection with obtaining such Approvals, including by submitting applications for such Approvals, prepared by MDE or its designee, if necessary under applicable Law.
- (b) Relicensing Proceedings for Holtwood and Safe Harbor. In future relicensing proceedings for Safe Harbor and Holtwood, the Parties shall actively advocate for: (1) downstream flows that will allow the Project to meet the numeric minimum flow requirements as prescribed in the Revised Certification; (2) hourly-flow releases at Holtwood to be publicly reported so that the Project can readily identify inflow conditions; (3) Holtwood and Safe Harbor to bear a proportionate share of the costs of the trap and transport program, with regard to both American Eels, and American Shad and River Herring; (4) Holtwood and Safe Harbor to bear a trash and debris removal requirement comparable to that of Constellation or to be required to bear an equitable sharing of the costs of removing trash and debris from the River; and (5) Holtwood and Safe Harbor to be required to bear an equitable sharing of the costs of removing aquatic invasive species from the River. The obligations of this subsection do not limit the Parties' ability to actively advocate on any other issue in the relicensing proceedings for Safe Harbor and Holtwood.
- (c) Waterkeepers' Sponsored Cleanups. Constellation agrees to sponsor and assist Lower Susquehanna Riverkeeper Association with any sponsored cleanups of the River by paying Five Thousand Dollars (\$5,000) per event (up to two per year) and by providing necessary access to lands, marinas, and/or boat launches of the Project in connection with the cleanups. Lower Susquehanna Riverkeeper Association will provide notice of the cleanup date and details at least 90 days prior to the event with a payment operative date 30 days prior to the event. Two-day cleanup events shall be considered one single cleanup event. Payments to Waterkeepers will be adjusted for inflation in accordance with CPI.
- (d) No Waivers. Subject to Section 3.2 below, Constellation reserves all defenses it may have in connection with any assertions of non-compliance of the WQC.

(e) Reimbursement of Oversight and Administrative Costs.

- (1) Constellation shall reimburse MDE and Maryland DNR in connection with the administration and oversight of Constellation's compliance with this Agreement and the Revised Certification as follows. Constellation shall annually reimburse each of MDE and Maryland DNR Seventy-Five Thousand (\$75,000). Payments shall be made annually by July 1 after the New License is issued. The annual payment shall be adjusted for inflation each year thereafter, based on the cumulative change in the CPI.
- (2) Constellation shall reimburse Lower Susquehanna Riverkeeper Association and Waterkeepers Chesapeake in connection with their administrative costs as a result of participation in functions described in this Agreement as follows. Constellation shall annually pay each of Lower Susquehanna Riverkeeper Association and Waterkeepers Chesapeake Fifteen Thousand (\$15,000). Payments shall be made annually by July 1 after the New License is issued to Lower Susquehanna Riverkeeper Association, which shall make further distribution to Waterkeepers Chesapeake. The annual payment shall be adjusted for inflation each year thereafter, based on the cumulative change in the CPI.
- (f) Fish Lift Design Changes. MDE shall not withhold approval of the 90% or final design plans for the EFL Modification Plan required under Condition 5(j) of the Revised Certification based on new or additional obligations not required by the Revised Certification. Constellation may rely on MDE and Maryland DNR's prior comments in its preparation of its 90% design plan.
- (g) Fish Stranding Survey. The results of the Fish Stranding Survey required by Condition 7 of the Revised Certification are solely for informational purposes for Maryland DNR and shall not change or affect the compensatory mitigation payments defined in Condition 7(b)(ii) of the Revised Certification or result in any operational modifications beyond those included in the Revised Certification.

2.8 Modification.

- (a) MDE may seek to petition to modify the New License, in accordance with applicable Law, in order to achieve compliance with any applicable effluent limitation, other limitations, or water quality standards or requirements issued or approved under Sections 301, 302, 303, 306, and 307 of the CWA or applicable State water quality law if the limitation, standard, or requirement is adopted or promulgated after the date of the Revised Certification and is more stringent that any requirements as of the date of the Revised Certification.
- (b) Notwithstanding Section 2.8(a), the Parties acknowledge that the Water Quality Mitigation Fund payments required by Condition 12 of the Revised Certification fully address and resolve all known or alleged water quality impacts resulting from the presence and operation of the Dam, including but not limited to impacts that may be asserted from nutrients or other pollutants or materials in the River upstream of the Project, those that may be captured, retained, altered, or delayed in the Reservoir, and any accumulation, scour, or other changes in timing in their passage downstream of the Project. Without limiting the generality of the foregoing, as a result of the Water Quality Mitigation Fund payments required by Condition 12,

which will be made annually throughout the term of the New License, and which may be used for a variety of purposes to mitigate potential water quality impacts, the State of Maryland will not, throughout the term of the New License, absent the existence of unforeseen, substantially changed circumstances, seek to impose upon the Project, through any request for a License modification, any additional requirements or obligations related to chlorophyll-a, dissolved oxygen, PCBs, or other pollutants or water quality conditions associated with pollution originating from sources outside of the Project known or alleged at the time of issuance of the Revised Certification.

(c) Constellation expressly reserves the right to object, on any available grounds, to any action by MDE seeking to modify the New License.

2.9 Debris Management.

Consistent with current practices as of the Settlement Date, the substantive operational requirements of the Debris Management Plan, Revision dated October 2021, until such time that a new or updated Debris Management Plan takes effect under Condition 14(a) of the Revised Certification and provided that doing so does not affect compliance with the terms of any existing annual FERC license for the Project or the New License.

2.10 **Aquatic Invasive Species**.

Until the effective date of the New License, Constellation shall continue to take actions to the maximum extent practicable, and consistent with current practices as of the Settlement Date, to prevent volitional passage of Aquatic Invasive Species (AIS) as defined in the Revised Certification. These actions include segregating and tendering AIS to Maryland DNR, or its agent, and operation of the East Fish Lift in trap and transport mode, provided that doing so does not affect compliance with the terms of any existing annual FERC license for the Project.

3. RESOLUTION OF CONTESTED MATTERS

Revised Certification set forth in Attachment A (without the attachments to the Revised Certification, to which the Parties have agreed and will be attached to the Revised Certification upon MDE's issuance) shall be issued by MDE and shall be MDE's decision on Reconsideration. Promptly after the Settlement Date, the Parties shall jointly submit the Revised Certification to FERC in the FERC Licensing Proceeding as a valid state water quality certification to be incorporated into the New License in accordance with Section 401 of the Clean Water Act. The joint submission shall be consistent with this Agreement and in form and substance satisfactory to the Parties.

- No Further Proceedings; Release of Claims. The Parties acknowledge and agree that MDE's decision on Reconsideration to issue the Revised Certification constitutes revision of the Certification. The Parties further agree to and hereby relinquish any further right to appeal the Certification or Revised Certification or to request a contested case hearing or further judicial review; the Parties also agree to support FERC's acceptance of the Revised Certification in the FERC Relicensing Proceeding and FERC's issuance of a New License on terms consistent with those in the Revised Certification. The Parties further acknowledge and agree that Constellation and Waterkeepers fully, forever, irrevocably, and unconditionally release, waive, and discharge MDE from any and all claims, demands, and causes of action of every kind, nature, and description, whether currently known or unknown, relating to the Certification or the Revised Certification, including those that were or could have been raised in the Constellation Administrative Proceeding, the Waterkeepers Administrative Proceeding, the State Lawsuit, the Federal Lawsuit, the FERC Declaratory Action, or the 2021 License Appeal. Notwithstanding the foregoing, if any other Person were to attempt to challenge the Revised Certification, or if there were to be further review of the Revised Certification for any reason in any forum, the Parties reserve their rights to participate fully in such proceedings, and the Parties further shall advocate and support positions that are consistent with the Revised Certification and this Agreement. The Parties acknowledge and agree that no other Person sought administrative reconsideration or appeal of the Certification.
- **3.3** Acknowledgement of Payment Operative Date. Upon the occurrence of the Payment Operative Date, the Parties shall execute an acknowledgement in the form attached hereto as Attachment B.
- 3.4 <u>Fish Passage Prescription</u>. Constellation hereby waives, and agrees not to assert, all rights pursuant to Section 1.10 of that certain Settlement Agreement effective as of April 21, 2016 by and between Constellation and the United States Department of the Interior Fish and Wildlife Service (the "DOI Settlement Agreement") to unilaterally withdraw from the DOI Settlement Agreement on the basis that any provision of this Agreement or of the Revised Certification is additive to or inconsistent with any term of the DOI Settlement Agreement.

3.5 No Admission of Liability.

- (a) By MDE. This Agreement is not and shall not be construed as an admission by MDE of the truth of any allegation or the validity of any claim or defense asserted by Constellation or Waterkeepers in the Contested Matters, or of any liability with respect to any of the Contested Matters.
- (b) By Constellation. This Agreement is not and shall not be construed as an admission by Constellation of the truth of any allegation or the validity of any claim or defense asserted by MDE or Waterkeepers in the Contested Matters, or of any liability with respect to any of the Contested Matters.
- (c) By Waterkeepers. This Agreement is not and shall not be construed as an admission by Waterkeepers of the truth of any allegation or the validity of any claim or defense asserted by MDE or Constellation in the Contested Matters, or of any liability with respect to any of the Contested Matters.

- (d) Non-Admissibility as Evidence. None of the terms of this Agreement may be offered or received in evidence or in any way referred to in any civil, criminal, or administrative action, other than proceedings that may be necessary to consummate or enforce this Agreement.
- 3.6 Noncompliance; Defense. In any action brought for noncompliance with the terms of the Revised Certification and notwithstanding other defenses that Constellation may have, Constellation reserves the right to raise as a defense that any such noncompliance is caused by events or circumstances arising from causes not reasonably foreseeable or beyond the reasonable control of Constellation, which cannot be avoided or overcome by due diligence. Circumstances beyond the reasonable control of Constellation include earthquake, flood, hurricane, severe weather or other act of God, war, riot, injunction, fire, pandemic, and compliance with any Law, rule, or Decree of any governmental body either existing now or hereafter created that conflicts with the requirements or obligations of the Revised Certification. Such circumstances do not include increased costs of performance, changed economic circumstances, normal inclement weather, or failure to obtain federal, State, or local permits unless Constellation has made timely and complete application for such permits.

4. DEFENSE; SEVERABILITY

4.1 **Duty to Cooperate**.

- Consistent with Sections 3.1 and 3.2, the Parties shall support without qualification FERC's acceptance of the Revised Certification and FERC's issuance of a New License on terms that are not inconsistent with the terms of the Revised Certification and this Agreement. The Parties shall not assist any other Person in seeking, in connection with FERC's issuance of the New License, the imposition of terms that are inconsistent with the terms of the Revised Certification and this Agreement. Each Party reserves the right to challenge any terms imposed by FERC that are inconsistent with the terms of the Revised Certification and this Agreement, including the right to seek rehearing of or to challenge on appeal FERC's imposition of such terms. If any Person brings any action (a "Challenge") to seek reconsideration of, appeal, seek a contested case hearing regarding, set aside, invalidate, void, or otherwise challenge this Agreement or the Revised Certification, in whole or in part, MDE shall defend against such Challenge, and Constellation and Waterkeepers shall provide reasonable cooperation, at each Party's own expense, with MDE and MDE's counsel in the defense of such Challenge, which cooperation may include furnishing records, information, and testimony and attending conferences and proceedings. Constellation and Waterkeepers shall not take, or assist any other party in taking, any position adverse to MDE in its defense against any Challenge.
- (b) The Parties agree that, if any petition for rehearing or petition for review of the New License is filed in the FERC Relicensing Proceeding, the Parties shall convene, within 90 days of the date the petition is filed, to discuss and consider in good faith whether, given the nature and scope of the petition, the Payment Operative Date can commence earlier than as defined in the Revised Certification with respect to the payment obligations in the Revised Certification.
- **4.2** Adverse Determinations; Severability. If any term of this Agreement is found to be invalid, illegal, or incapable of being enforced, or is modified by a court of competent jurisdiction, in whole or in part, (i) such original term shall be excluded from this Agreement to

the extent of such invalidity, illegality, unenforceability, or modification; (ii) all other terms of this Agreement shall remain in full force and effect; and (iii) the Parties shall negotiate in good faith to promptly amend this Agreement as may be necessary to, as closely as reasonably practicable, implement the original intent of the Parties with respect to the subject matter of any such term.

5. ENFORCEMENT

5.1 Enforcement. This Agreement is a contract enforceable in a judicial forum pursuant to applicable Law.

6. OTHER COVENANTS

- 6.1 Reservation of Rights by the Parties. Apart from what MDE has agreed as part of this Agreement, nothing in this Agreement shall otherwise be construed to limit the authority of MDE to issue any order or to take any action to the extent provided by Law to protect public health or the environment, or to limit any authority MDE now has or may hereafter be delegated, or to limit the right of Constellation to object to any such order or action issued or taken by MDE.
- **6.2** Agreement Not a Permit. This Agreement is not a permit and by itself does not authorize any activity.

7. REPRESENTATIONS AND WARRANTIES

- Representations and Warranties of Constellation. Constellation is a limited liability company, duly organized, validly existing and in good standing under the laws of each of the Commonwealth of Pennsylvania. Constellation has (a) all necessary limited liability company power and authority to execute, deliver, and perform its obligations under this Agreement; and (b) taken or caused to be taken all necessary organizational action to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement. No Approval of any Person is required for the execution and delivery of this Agreement by Constellation, or the performance by Constellation of its obligations under this Agreement. This Agreement constitutes a legal, valid, and binding obligation of Constellation, enforceable against Constellation in accordance with its terms. Constellation has provided to MDE true and complete copies of all agreements in effect as of the date of this Agreement between Constellation or any of its Affiliates and the Chester Water Authority, the York Energy Center, or Old Dominion Electric Cooperative. The tariffs and other requirements of the PJM Interconnection Regional Transmission Organization are available on the PJM website.
- **7.2** Representations and Warranties of MDE. No Approval of any Person is required for the execution and delivery of this Agreement on behalf of MDE. This Agreement constitutes a legal, valid, and binding obligation of MDE in accordance with its terms.
- 7.3 Representations and Warranties of Waterkeepers. No Approval of any Person is required for the execution and delivery of this Agreement on behalf of Waterkeepers. This Agreement constitutes a legal, valid, and binding obligation of Waterkeepers in accordance with its terms.

8. GENERAL PROVISIONS

8.1 Term. This Agreement shall be effective on the Settlement Date and shall continue in effectiveness through the expiration of the New License or the end of FERC's jurisdiction over the Project, whichever is earlier, or if any annual licenses are issued by FERC thereafter, until the expiration of the last such annual license (the "Term").

8.2 Entire Agreement; Joint Drafting; Amendments; Waivers.

- (a) Entire Agreement; Joint Drafting. This is the entire agreement of the Parties with respect to the subject matter hereof, and supersedes all prior and contemporaneous agreements, arrangements, understandings, negotiations, communications, and promises regarding such subject matter, whether written or oral, including without limitation the 2019 Settlement Agreement between Constellation and MDE. This Agreement has been jointly drafted by the Parties and shall not be construed against any Party on account that it was the drafter hereof.
- (b) Amendments; Waivers. This Agreement may be amended or modified only by a written agreement executed and delivered by duly authorized representatives of the Parties. Except as otherwise provided in this Agreement, any failure of any Party to comply with any obligation, covenant, agreement or condition herein may be waived by any Party, as applicable, only by a written instrument granting such waiver, but such waiver or failure to insist upon strict compliance with such obligations, covenant, agreement, or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure, or operate as a waiver of any rights or privileges hereunder, except to the extent expressly waived in such written instrument.

8.3 Assignment; Binding Effect; Third Party Beneficiaries.

- (a) Assignment and Transfers. Under applicable Law, Constellation may not transfer the New License to another entity without obtaining approval from FERC, which must find that the transferee is financially able to fulfill the obligations of Constellation. To the extent Constellation seeks to assign or delegate this Agreement in connection with a transfer of the New License, Constellation shall not assign or delegate this Agreement, or any rights or obligations hereunder, without providing MDE, at least fifteen (15) days prior to the consummation of the proposed transfer, an agreement in form and substance reasonably satisfactory to MDE evidencing the transferee's agreement to be bound by this Agreement.
- shall be binding upon and inure to the benefit of each Party and its successors, and for MDE and Constellation its permitted assigns, and, except as provided in Section 8.3(c), nothing in this Agreement, express or implied, is intended to or shall confer upon any other Person any rights, benefits, or remedies of any nature whatsoever under or by reason of this Agreement. Nothing in this Agreement, nor any act of performance by the Parties, shall collaterally estop MDE in any other proceeding with any Person other than Constellation.
- (c) Express Third Party Beneficiaries. Notwithstanding anything herein to the contrary, the Parties agree that the United States is an express third party beneficiary of Section 3.4, with the full power and authority to enforce Section 3.4 as if it were a party hereto with the same rights hereunder as MDE.

8.4 Notices. All notices, requests, demands, and other communications under this Agreement shall be in writing and if delivered in hand shall be deemed to have been duly given when delivered personally, if sent by United States certified mail, return receipt requested, with postage prepaid, shall be deemed duly given on delivery by United States Postal Service, or if sent by overnight courier services with a mandatory request for a delivery receipt shall be deemed duly given on the Business Day of delivery if delivered prior to 5:00 p.m. local time or on the following Business Day if delivered after 5:00 p.m. local time or on a non-Business Day, addressed to the respective Parties as follows:

To Constellation: General Counsel

Constellation Energy Generation, LLC

1310 Point Street

Baltimore, Maryland 21231 legalnotices@constellation.com

To MDE: Director, Water and Science Administration

Maryland Department of the Environment

1800 Washington Boulevard Baltimore, Maryland 21230

With a copy (which shall not

constitute notice) to:

Office of the Attorney General

Maryland Department of the Environment 1800 Washington Boulevard, Suite 6048

Baltimore, Maryland 21230 Attn: Principal Counsel

To Waterkeepers: Executive Director

Lower Susquehanna Riverkeeper Association

338 South Front Street Wrightsville, PA 17368 info@lowsusriverkeeper.org

Executive Director, Waterkeepers

Chesapeake P.O. Box 11075,

Takoma Park, MD 20913-1075 admin@waterkeeperschesapeake.org

or to such other addresses as the Party to whom notice is given previously may have furnished to the other in writing in the manner set forth above. A copy of such notice shall also be provided by email, to the email address indicated above, if applicable.

8.5 Governing Law. This Agreement is governed by, and shall be interpreted, construed and enforced in accordance with, the Laws of the State of Maryland without regard to conflicts of laws principles.

8.6 Dispute Resolution.

- (a) Negotiations. If any dispute arises out of or relates to this Agreement (a "Dispute"), before submitting the dispute to judicial dispute resolution the Parties shall undertake the procedures in this Section 8.6(a). Any Party (the "Claimant") may invoke this Section 8.6(a) by sending a written notice of dispute (a "Dispute Notice") to the other Parties in accordance with Section 8.4, which Dispute Notice shall (1) contain the words "NOTICE OF DISPUTE UNDER CONOWINGO DAM WATER QUALITY SETTLEMENT AGREEMENT" in the subject line thereof; (2) state, in reasonable detail, the Claimant's position with respect to the Dispute; and (3) state the Claimant's proposed resolution of the Dispute. Within thirty (30) days after the Dispute Notice is deemed given in accordance with Section 8.4, representatives of the Parties having authority to resolve the Dispute alleged in the Dispute Notice shall meet in-person at least once for the purpose of engaging in good faith negotiations to resolve such Dispute.
- (b) Jurisdiction and Venue. Any Dispute that cannot be resolved by the Parties pursuant to Section 8.6(a) shall be heard and determined exclusively in a court of competent jurisdiction in Baltimore City, Maryland.
- (c) JURY TRIAL WAIVER. EACH PARTY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY RIGHT TO HAVE A TRIAL BY JURY IN ANY PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT.
- **8.7** <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures to this Agreement may be transmitted by facsimile or by PDF e-mail attachment.

* * *

The remainder of this page is left blank intentionally. Signatures follow.

IN WITNESS WHEREOF, the Parties have executed this Conowingo Dam Water Quality Settlement Agreement as of the Settlement Date.

STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT

By: DL.Com

 $Name: \quad \hbox{D. Lee Currey}$

Title: Director, Water and Science Administration

Date: 09/26/2025

Approved as to form and legal sufficiency this <u>26</u> day of <u>September</u>, 2025.

Jonathan E.C. May Assistant Attorney General

CONSTELLATION ENERGY GENERATION, LLC

By:

Name: Matthew E. Price

Title:

Executive Vice President, General

Counsel

Date: September 26, 2025

WATERKEEPERS CHESAPEAKE

LOWER SUSQUEHANNA RIVERKEEPER ASSOCIATION

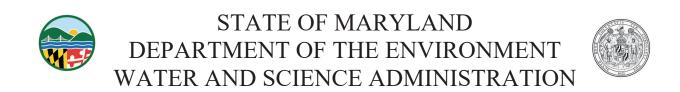
By:

Name: Title:

Date:

9/26/201

ATTACHMENT A FORM OF REVISED CERTIFICATION



WATER QUALITY CERTIFICATION (Revised) 17-WQC-02 (R1)

ISSUANCE DATE: April 27, 2018

REVISED ISSUANCE DATE: [INSERT DATE]

CERTIFICATION HOLDER: Constellation Energy Generation, LLC

(formerly Exelon Generation Company, LLC)

PROJECT LOCATION: Conowingo Hydroelectric Project/FERC Project No. P-405

Susquehanna River, at river mile 10 in Maryland, spanning the river between Cecil and Harford Counties, Maryland. The lowermost six miles of the Project's reservoir lie within Maryland, while the remaining eight miles extend into York

and Lancaster counties, Pennsylvania

UNDER AUTHORITY OF SECTION 401 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND ITS AMENDMENTS AND IN ACCORDANCE WITH §9-313 THROUGH §9-323, INCLUSIVE, OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND, THE WATER AND SCIENCE ADMINISTRATION ("ADMINISTRATION") HAS DETERMINED THAT THE REGULATED ACTIVITY DESCRIBED IN THE REQUEST FOR CERTIFICATION OF THE CONOWINGO HYDROELECTRIC PROJECT/FERC PROJECT P-405 WILL NOT VIOLATE MARYLAND'S WATER QUALITY STANDARDS IF CONDUCTED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS CERTIFICATION.

THIS CERTIFICATION IS HEREBY GRANTED WITH CONDITIONS. THIS CERTIFICATION DOES NOT RELIEVE THE APPLICANT OF RESPONSIBILITY FOR OBTAINING ANY OTHER APPROVALS, LICENSES, OR PERMITS IN ACCORDANCE WITH FEDERAL, STATE, OR LOCAL REQUIREMENTS. A COPY OF THIS REQUIRED CERTIFICATION HAS BEEN SENT TO THE FEDERAL ENERGY REGULATORY COMMISSION (FERC). THE CERTIFICATION HOLDER SHALL COMPLY WITH THE CONDITIONS LISTED BELOW:

PROJECT DESCRIPTION

Tracking Number: 201762332 Agency Interest Number: 2063

The Project is a peaking hydroelectric facility that includes: (1) the Dam, (2) a spillway, (3) the Reservoir, (4) an intake and powerhouse, (5) the West Fish Lift and the East Fish Lift, and (6) an Eel passage facility on the west side, all of which are located on the River approximately 10 miles north of the River's confluence with the Chesapeake Bay.

The West Fish Lift, adjacent to the Dam's right abutment, and the newer East Fish Lift, located near the midpoint of the Dam, are used primarily to assist in the passage of Shad, Herring, and other migratory fish during the March-June migration season. The Reservoir serves as the lower reservoir for Muddy Run. It also serves as the source of cooling water for Peach Bottom and the York Energy Center. The Reservoir is also a public water supply source, with the City of Baltimore and Chester Water Authority (in Pennsylvania) having permitted withdrawals of 250 million gallons per day and 30 million gallons a day, respectively. The powerhouse is integrated with the Dam. There are 13 turbine-generator units, associated draft tubes, and transformer bays. Water flowing through the turbines is discharged via the draft tubes into the Tailrace.

This Water Quality Certification (Certification) is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments, Title 9, Subtitle 3 of the Environment Article, and Code of Maryland Regulations (COMAR) 26.08.02.10. The Maryland Department of the Environment (Department) has determined from a review of the request application file, and upon subsequent administrative reconsideration, that the project activities described above will not violate Maryland's water quality standards, provided that the following conditions are satisfied. A Public Notice for the Certification request was issued on July 10, 2017, and a Public Hearing for the Certification request was held on Tuesday, December 5, 2017 at the Harford Community College in Bel Air, Maryland. The Department issued an initial decision on the Certification request on April 27, 2018. After administrative reconsideration requested by the Certification Holder, Lower Susquehanna Riverkeeper Association and Waterkeepers Chesapeake, the Department is issuing this Revised Certification as the Department's final decision on Reconsideration.

DEFINITIONS

In addition to terms defined elsewhere in this Certification, the following terms have the following meaning when used in this Certification and the Attachments hereto:

"Anadromous" means migratory fish that spawn in freshwater rivers but spend most of their life in the ocean.

"Application" means that certain Application for a Maryland Water Quality Certification for the Conowingo Hydroelectric Project submitted to the Department by the Certification Holder with respect to the Project on May 17, 2017, as amended, supplemented, or modified.

"Aquatic Invasive Species" means Northern Snakehead (*Channa argus*), Flathead Catfish (*Pylodictis olivaris*), and Blue Catfish (*Ictalurus furcatus*) or other species identified as detrimental to the ecosystem and non-native through this Certification.

- "Authorization" means any applicable license, permit, approval, consent, exemption, or authorization from a federal, State, or local governmental authority.
- "Bay" means the Chesapeake Bay and its tidal tributaries.
- "cfs" means cubic feet per second.
- "CPI" means the Consumer Price Index for All Urban Consumers (CPI-U; U.S. City Average; all items, not seasonally adjusted; 1982-84=100 reference base) published from time to time by the U.S. Bureau of Labor Statistics. Any amounts in this Certification adjusted for inflation in accordance with the CPI shall be based on the cumulative change in CPI.
- "Dam" means the Conowingo Dam, as described in Section 1.1 of the FERC Application.
- "Maryland DNR" means the Maryland Department of Natural Resources.
- "DO" means dissolved oxygen.
- "DOI" means the United States Department of the Interior.
- "DOI Modified Prescription for Fishways" means the USFWS Modified Prescription for Fishways for the Conowingo Hydroelectric Project (Project, Conowingo, and Conowingo Project), FERC P-405, pursuant to Section 18 of the Federal Power Act (FPA) dated June 8, 2016.
- "Downstream fish passage efficiency" means the percentage of the fish that approach the upstream side of the Project and survive as they pass the Project.
- "Eel" means American eel (Anguilla rostrata).
- "East Fish Lift" or "EFL" means the east fish lift at the Project.
- "Environment Article" means the Environment Article of the Annotated Code of Maryland.
- "FERC" means the Federal Energy Regulatory Commission.
- "FERC Application" means that certain Application for New License for Major Water Power Project-Existing Dam submitted to FERC by the Certification Holder with respect to the Project on or about August 9, 2012, as amended, supplemented, or modified.
- "Fish Lift" means an elevator-like structure with a Hopper used to convey fish from the Tailwaters to the headpond of high dams or in connection with Trap and Transport operations.
- "Herring" means, interchangeably and collectively, alewife (*Alosa pseudoharengus*) and blueback herring (*Alosa aestivalis*).
- "Holtwood" means the Holtwood Hydroelectric Project, FERC Project Number 1881.

"Hopper" means the structural part of the fish lift used to hold fish as they are transported from the Tailwaters to the headpond.

"Laws" means applicable laws, statutes, regulations, rules, administrative orders, and judicial orders.

"Marietta Gage" means the water stage gage located on the River approximately one mile downstream of Marietta, Pennsylvania, USGS station #01576000.

"Muddy Run" means the Muddy Run Pumped Storage Project, FERC Project Number 2355.

"New License" means the new license for the Project requested in the FERC Application.

"NMFS" means the National Marine Fisheries Service.

"Payment Operative Date" means the date 30 days after the following, whichever is later: (1) the times to file any challenges to the FERC-issued New License or any component thereof (including this Revised Water Quality Certification) have expired, and no challenges have been filed; or (2) consideration of any filed challenges to the FERC-issued New License or any component thereof has been concluded with no opportunities for further review and the New License and all components thereof have been affirmed.

"Peach Bottom" means the Peach Bottom Atomic Power Station.

"Project" means the Conowingo Hydroelectric Project, FERC Project Number 405, including all Project lands, the powerhouse, and the spillway.

"Reservoir" means the water impounded by the Dam, which is sometimes referred to as the Conowingo Pond or Conowingo Pool.

"River" means the Susquehanna River.

"SAV" means submerged aquatic vegetation.

"Secretary" means the Secretary of the Environment of the State of Maryland, and any successor thereto.

"Safe Harbor" means the Safe Harbor Hydroelectric Project, FERC Project Number 1025.

"Sediment Management Plan" or "SDMP" means the Certification Holder's Sediment Management Plan dated August 2012, included in the FERC Application, revised September 2021, and incorporated herein by reference.

"Shad" means American shad (Alosa sapidissima).

"Shoreline Management Plan" or "SMP" means the Certification Holder's Shoreline Management Plan

dated August 2012, included in the Application and in Volume 3 of the FERC Application, and as revised September 2021, which is incorporated herein by reference.

"SRAFRC" means the Susquehanna River Anadromous Fish Restoration Cooperative.

"SRMFAIS Collaborative" means the Susquehanna River Migratory Fish and Aquatic Invasive Species Collaborative consisting of U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Susquehanna River Basin Commission, Pennsylvania Fish and Boat Commission, Maryland Department of Natural Resources, New York State Department of Environmental Conservation, the owners and operators of each of the lower Susquehanna River hydroelectric dams (Conowingo, Holtwood, Safe Harbor, and York Haven), and the Susquehanna River Anadromous Fish Restoration Cooperative formed to address management of aquatic invasive species in the Susquehanna River watershed.

"Station 643" means monitoring station 643, located approximately 0.6 miles downstream of the Dam for instream monitoring of dissolved oxygen under the Project's Maryland State Discharge Permit No. 19DP0491 MD, NPDES Permit No. MD0002518 (December 2021).

"Sturgeon" means Atlantic and shortnose sturgeon (*Acipenser brevirostrum*, *Acipenser oxyrinchus* oxyrinchus).

"Tailrace" means the area downstream of the Dam that is in the hydraulic influence of Project operations.

"Tailwaters" means the Tailrace, extending to the downstream tip of Rowland Island.

"Target Efficiency" means the upstream and downstream passage criteria that are the basis of the DOI 2016 Modified Prescription for Fishways Pursuant to Section 18 of the Federal Power Act and the requirements of this Certification.

"Term" means the term of the New License.

"TMDL" means a calculation for an impaired water body of the maximum amount of a pollutant the water body can receive and still meet applicable water quality standards in accordance with federal Clean Water Act requirements pursuant to COMAR 26.08.11.03B(49).

"Trap and Transport" means fish that are collected at a downstream project and loaded in a tank truck and transported and released into some location upstream of that project.

"Upstream Eel Migration Season" begins on May 1 or whenever River temperatures are 14 degrees Celsius, whichever is earlier, and runs until November 1 or when the fall mean daily River temperature below Conowingo Dam is 14 degrees Celsius or less for three consecutive days, whichever is earlier. River temperatures shall be based on daily monitoring of water temperatures at 11 am at Station 643, or another location agreed upon by the Certification Holder and MDE.

"Upstream Fish Passage Efficiency" means the percentage of the fish present in the Tailwaters that successfully move through the fish lift and continue upstream migrations; e.g., the percentage of fish that start at point B (downstream end of Rowland Island in the case of the Dam) and passes point E in the diagram set forth in <u>Attachment A</u> of this Certification.

"USFWS" means the United States Fish and Wildlife Service.

"Volitional Passage" means fish passage from the Tailwaters to the headpond.

"West Fish Lift" or "WFL" means the west fish lift at the Project.

"WQS" means applicable Maryland water quality criteria and standards set forth in COMAR 26.08.01 and COMAR 26.08.02.

The Certification Holder shall comply with the following conditions:

SPECIAL CONDITIONS

1) Compliance with WQS

a) The Certification Holder shall meet all applicable WQS associated with the operations of and discharge from the Project as set forth in the conditions of this Certification. Except as specifically set forth herein, this Certification does not authorize the discharge of any pollutants. The Certification Holder shall not discharge any waste or wastewater from the Project, unless it is specifically authorized by MDE. This Certification does not authorize any work to occur in waters of the State, including any dredging or the construction or placing of any physical structures, facilities, fill, or debris or the undertaking of related activities in any waters of the State. The Certification Holder shall comply with any other permit or authorization required by law, including all water quality-related performance standards and conditions required by such other permit or authorization.

2) Operational Flow Regime

a) The Certification Holder shall operate the Project in accordance with the following operational flow regime ("<u>Interim Flow Regime</u>") beginning at the time of issuance of the New License and ending not later than the third anniversary of the issuance of the New License.

Interim Flow Regime			
Date	Minimum Flow*		
September 15 - March 31	3,500 cfs or natural inflow, whichever is less		
April 1 – 30	10,000 cfs or natural inflow, whichever is less		
May 1 - June 15	7,500 cfs or natural inflow, whichever is less		
June 16 - September 14	5,000 cfs or natural inflow, whichever is less		

^{*}Natural inflow must be measured at the Marietta Gage.

b) The Certification Holder shall operate the Project in accordance with the following operational flow regime ("Year 4 Flow Regime"), which shall begin no later than the third anniversary of the issuance of the New License, unless modified under Condition 2 (f), (h) through (k), or (o) herein:

Year 4 Flow Regime				
Date	Minimum Flow*	Down-Ramping Rate	Up-Ramping Rate	Maximum Flow**
January 1 –31	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	None	None
February 1– 29	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	None	None
March 1 –15	11,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	None
March 16 –31	11,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	None
April 1 –30	17,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	None
May 1 – 31	17,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	75,000 cfs
June 1 – 15	11,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	75,000 cfs

Year 4 Flow Regime				
Date	Minimum Flow*	Down-Ramping Rate	Up-Ramping Rate	Maximum Flow**
June 16 –30	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	75,000 cfs
July 1 – 31	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	79,000 cfs
August 1 –31	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	79,000 cfs
September 1 – 30	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	79,000 cfs
October 1 – 31	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	Up to 40,000 cfs/hour	None
November 1 – 30	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	None	None
December 1 – 31	5,000 cfs or natural inflow, whichever is less	Up to 12,000 cfs/hour if Conowingo Discharge is less than 30,000 cfs	None	None

^{*}Natural inflow must be measured at the Marietta Gage.

- c) The Year 4 Flow Regime may not be modified or deviated from other than as described in (f), (h) through (k), or (o) herein. For the purposes of requesting a modification to the Year 4 Flow Regime by the Certification Holder, the Certification Holder shall conduct an "Alternative Flow Regime Study" for MDE's review and approval.
 - i) An "Alternative Flow Regime Study" or "AFRS" means a study that demonstrates that the benefits to the aquatic system of a modified flow regime proposed by the Certification Holder are equal to or exceed the Year 4 Flow Regime. The AFRS shall be subject to independent external technical and scientific peer review and submitted by the Certification Holder to MDE for review and approval. The peer review shall consist of at least three qualified and independent technical experts or scientists with

^{**}Maximum flow restrictions only apply when the natural inflow is less than 86,000 cfs.

- specialties in the appropriate scientific or technical disciplines and approved in writing by MDE prior to initiation of any peer review.
- ii) For purposes of this Operational Flow Regime Condition, "benefits to the aquatic system" shall include, at a minimum, consideration of measurable improvements in the following, as applicable: (a) the modeled, estimated or projected percentage of Shad and Herring successfully entering the fish lifts within three days of their entry into the Tailrace; (b) the modeled, estimated or projected condition of downstream aquatic life, as evidenced by a modeled, estimated or projected reduction in the number of fish strandings; (c) the modeled, estimated or projected habitat, abundance, and composition of macroinvertebrates and freshwater mussels; and (d) the modeled, estimated or projected presence and composition of SAV within the segment of the River between the Project and the head of tide.
- d) For each AFRS, the Certification Holder shall develop a study design with the objective of analyzing one or more component parts of the Year 4 Flow Regime or another flow regime to determine whether such component parts provide sufficient benefits to the aquatic system. The Certification Holder shall subject the study designs to the peer review and incorporate any consensus recommendations into the study design as a result of that process.
- e) The Certification Holder shall provide MDE, for review and approval, each final study design with the results of the peer review prior to initiating the AFRS. Upon MDE approval the AFRS shall be filed with FERC.
- f) If the AFRS and the results of peer review determine that a modified flow regime is likely to provide equal or greater benefits to the aquatic system compared to the unmodified Year 4 Flow Regime, the Certification Holder may submit to MDE for review and approval a modified flow regime and implementation schedule along with the final AFRS and results of the peer review. The Certification Holder shall submit the results of any completed AFRS including the results of peer review to MDE for evaluation a minimum of 12 months prior to requesting a modification. Upon MDE approval the modified flow regime and implementation schedule, including the final AFRS and results of the peer review shall be filed with FERC.
- g) The Certification Holder shall submit a report to MDE on the seventh anniversary after the issuance of the New License and every five years thereafter on developments in new technology that will provide a measurable reduction in the peaking generation at the Project which are technologically and economically feasible to implement at the Project at the time of the report. Technologically and economically feasible for Condition 2 (g) means that new technology exists that could be implemented to

- provide a measurable reduction in the peaking generation at the Project without causing a reduction in the pre-tax present value of the combined revenues of the Project and Muddy Run.
- h) If compliance with the Interim Flow Regime, the Year 4 Flow Regime, or an approved modified flow regime, as the case may be (each, "Applicable Flow Requirements"), would cause the Certification Holder to violate or breach any Law, any Authorization, including the Nuclear Regulatory Commission license for the Peach Bottom Atomic Power Station, the FERC license for the Muddy Run Pumped Storage Project No. 2355 ("Muddy Run Project"), any agreement with the City of Baltimore or other governmental entity, or any tariff or other requirement of the PJM Interconnection Regional Transmission Organization or their assigns, the Certification Holder may deviate from the prescribed flows to the least degree necessary in order to avoid such violation or breach.
- i) If compliance with any of the Applicable Flow Requirements would cause the Certification Holder to violate any agreement in effect as of September 1, 2025, with the Chester Water Authority, Old Dominion Electric Cooperative, or the York Energy Center, the Certification Holder may deviate from the Applicable Flow Requirements to the least degree necessary in order to avoid such violation or breach.
- j) If compliance with any of the Applicable Flow Requirements would cause or exacerbate flooding or a similar public safety hazard, the Certification Holder may deviate from the Applicable Flow Requirements to the least degree necessary in order to avoid such flooding or public safety hazard.
- k) Not including the authorized deviations in Conditions 2(h), (i), and (j) of this Certification, the Certification Holder shall have the flexibility to deviate from the upramping, down-ramping and maximum flow restrictions according to the following limits during each month:
 - i) January, February: eight total permitted hours of deviation per month;
 - ii) March, April, May, and that portion of June during which the East Fish Lift (EFL) is in operation: no deviations allowed;
 - iii) June after EFL operation has ceased: eight total permitted hours of deviation per month of which no more than 50% will be allocated to down-ramping and up-ramping;
 - iv) July, August: 26 total permitted hours of deviation per month of which no more than 50% will be allocated to down-ramping and up-ramping;
 - v) September: 32 total permitted hours of deviation per month of which no more than 50% will be allocated to down-ramping and up-ramping;

- vi) October: 14 total permitted hours of deviation per month; and
- vii) November, December: eight total permitted hours of deviation per month.

When the Certification Holder deviates from the down-ramping or up-ramping restrictions of the Applicable Flow Requirements, the amount of time applied against the limits set forth above is two hours per event, regardless of the actual amount of time it takes the Certification Holder to complete the down-ramping or up-ramping event. Minimum flow releases may be temporarily modified if required by operating emergencies beyond the control of the Certification Holder, and for short periods upon mutual agreement among the Certification Holder and MDE. Upon agreement, the Certification Holder shall notify FERC. The Certification Holder must maintain complete and accurate records of all deviations that occur pursuant to this section.

- 1) For authorized deviations in Conditions 2(h), (i), and (j) of this Certification and unplanned deviations, the Certification Holder must file a report with MDE and FERC as soon as possible, but no later than 14 days after the onset of the incident. The report must describe the incident, including: (1) the cause, (2) the duration and magnitude, (3) any pertinent operational and/or monitoring data, (4) a timeline of the incident and the Certification Holder's response, (5) any adverse environmental effects, (6) documentation that MDE and USFWS were notified and any comments received, or, affirmation that no comments were received, and (7) any measures to be implemented to prevent similar incidents in the future.
- m) For the authorized deviations in Conditions 2(k) of this Certification, the Certification Holder must file a report with MDE and FERC by July 31 for the authorized deviations from January 1st through June 30th. The report must describe the deviation, including: (1) the duration, timeline and magnitude, (2) any pertinent operational and/or monitoring data, and (3) any adverse environmental effects.
- n) No later than March 1 of each year, the Certification Holder shall provide an annual report to MDE and FERC of all authorized deviations in Conditions 2(h), (i), (j) and (k) of this Certification and unplanned deviations from the Applicable Flow Requirements that occurred during the previous calendar year. The annual report shall include, at a minimum, reason for the deviation, description of the hourly flows provided during the deviation period, the duration of the hourly flows under these circumstances, and any observed adverse impacts to aquatic life (e.g., fish kills, additional observed delays in migratory fish reaching the fish lifts, etc.).
- o) The Year 4 Flow Regime also may be modified in accordance with the following:
 - i) Within six months after publication of the final FERC license or any license amendment for Holtwood or Safe Harbor indicating that the flow

requirements at Holtwood or Safe Harbor have changed or will change, the Certification Holder shall deliver a report (an "Improved Minimum Flow Report") to MDE, portions of which involving the assessment of "Detrimental Economic Impact" as described below may be designated as confidential, stating (1) whether or not the changed flow requirements at Holtwood or Safe Harbor will permit the achievement of greater minimum flows at the Dam than the minimum flows set forth in the Year 4 Flow Regime or any other approved Modified Flow Regime; (2) the greatest increase in minimum flows at the Dam that will result in benefits to the aquatic system under the Condition 2(c)(ii) criteria without causing a Detrimental Economic Impact (defined below) (the "Improved Minimum Flows"); and (3) the operational and cost impacts of implementing the Improved Minimum Flows, if any. The Improved Minimum Flow Report shall be based upon publicly available energy price forecasts and discount rates, and, subject to Condition 21(a) of this Revised Certification, the Certification Holder shall provide sufficient supporting documentation to explain the Improved Minimum Flows Proposal.

- ii) A "Detrimental Economic Impact" shall be deemed to exist if the Modified Present Value is less than the Unmodified Present Value. "Unmodified Present Value" means a good faith projection, based on publicly available energy price forecasts and discount rates, of the pre-tax present value of combined energy revenues that Conowingo and Muddy Run would expect to receive through the remainder of the Term of the New License (excluding any annual extensions) if no modification was made to the Year 4 Flow Regime. "Modified Present Value" means, with respect to any potential change in the Year 4 Flow Regime, a good faith projection, based on publicly available energy price forecasts and discount rates, of the pre-tax present value of combined energy revenues that Conowingo and Muddy Run would expect to receive through the remainder of the Term of the New License (excluding any annual extensions).
- iii) Within six months (unless a new timeframe is otherwise agreed upon) after receiving an Improved Minimum Flow Report that proposes Improved Minimum Flows, MDE agrees to notify the Certification Holder that it either approves or does not approve the proposed Improved Minimum Flows. If MDE approves the proposed Improved Minimum Flows, the Certification Holder shall submit a proposed modified flow regime and implementation schedule to MDE requesting a modification of the Revised WQC and a modification request to FERC. After modification

of the Revised WQC and approval by FERC, the Certification Holder shall operate in accordance with the modified flow regime approved by MDE and FERC and with any required modification to the FERC License within the specified timeframe.

3) Minimum Stream Flow Operational Plan

- a) The Certification Holder shall within 6 months following issuance of the New License submit a Minimum Stream Flow Operational Plan ("MSFOP"), governing operations under the Interim Flow Regime set forth in Condition 2(a) of this Revised Certification, to MDE for review and approval, so that MDE may ensure that the MSFOP is consistent with Condition 2(a) and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Minimum Stream Flow Operational Plan dated March 18, 2022, attached hereto as Attachment B. The Certification Holder shall implement and comply with the MSFOP as approved by MDE and as thereafter submitted to and approved by FERC. The MSFOP as approved by MDE and FERC shall be made part of this Certification.
- b) No less than 24 months prior to the effective date of the Year 4 Flow Regime set forth in Condition 2(b) of this Revised Certification, the Certification Holder shall submit a revised MSFOP ("Revised MSFOP") governing operations under the Year 4 Flow Regime. The Revised MSFOP, and any subsequent modifications proposed by the Certification Holder, must be submitted to MDE for review and approval before it is submitted to FERC, so that MDE may ensure that the Revised MSFOP is consistent with the Year 4 Flow Regime set forth in Conditions 2(b) and 2(h) through 2(k) of this Revised Certification. Upon MDE approval the Revised MSFOP shall be filed with FERC for its approval.
- c) The Revised MSFOP will include at a minimum:
 - a detailed description of how the Project will comply with the minimum flow, ramping rate, and maximum flow requirements of the New License, as well as Conowingo reservoir level restrictions specified in the New License;
 - ii) a description of the mechanisms and structures (e.g., type and exact locations of all flow and reservoir elevation monitoring equipment and gages) to be used for maintaining compliance with operational requirements, and procedures for maintaining and calibrating monitoring equipment; and
 - iii) standard operating procedures to be implemented during routine

maintenance, including a schedule of routine maintenance, and procedures to be implemented during conditions outside of normal operation, including during emergency conditions such as unscheduled facility shutdowns and maintenance.

- d) The Certification Holder shall implement and comply with the Revised MSFOP and any subsequent modifications, upon approval by FERC. Upon approval the Revised MSFOP, and any subsequent modifications proposed by the Certification Holder and approved by FERC and MDE, shall be attached and made part of this Certification.
- e) The Certification Holder shall submit an annual report to MDE by March 1 of each year detailing the implementation of the MSFOP or Revised MSFOP, including any deviations from the MSFOP or Revised MSFOP and processes to prevent those deviations in the future.

4) Monitoring Stream Flows in the Tailrace

- a) The Certification Holder shall complete a study regarding the feasibility of redesigning, installing, and maintaining best available real-time flow telemetry at the United States Geological Survey (USGS) flow gage in the project tailrace (No. 01578310) ("<u>Tail Race Gage Study</u>") or otherwise downstream of the spillway channel within one year of issuance of the New License. The Tail Race Gage Study shall include consultation with USGS and MDE and will be sited to capture total flow from the Project. The Tail Race Gage Study findings shall be reported to MDE within sixty (60) days of study completion.
- b) If the Certification Holder, following consultation with MDE and USGS, concludes in the Tail Race Gage Study that it is feasible to do so, the Certification Holder shall submit to the USGS and MDE, for review and approval, a plan for the redesign, installation, and maintenance of best available real-time flow telemetry at the stream gage in the Tailrace (USGS Station Gage #01578310) ("Tailrace Gage Plan") or comparable area that captures the total flow from the Project within one hundred eighty (180) days after completing the Tail Race Gage Study. The Tailrace Gage Plan shall include:
 - i) an implementation schedule;
 - ii) documentation of consultation;
 - iii) copies of recommendations on the completed Tail Race Gage Plan; and
 - iv) specific descriptions of how any comments are accommodated by the Tail

Race Gage Plan.

- c) The Certification Holder shall implement and comply with the Tailrace Gage Plan upon approval. Upon approval the Tailrace Gage Plan, and any subsequent modifications proposed by the Certification Holder and approved by FERC, USGS, and MDE, shall be made part of this Certification.
- d) The Tailrace Gage Plan shall include a provision requiring the Certification Holder to submit monitoring results from any new Tailrace Gage annually, by March 1 of the following year, to MDE. These results shall be included in the MSFOP or Revised MSFOP annual report.

5) Fish Passage

- a) As specified in Condition 5 of the Certification, the Certification Holder shall take actions designed to advance the goals that the Project ultimately be able to allow up to 5,000,000 Shad and 12,000,000 Herring that approach the Project to pass the Dam each year during the Term.
- b) The Certification Holder shall implement and comply with all provisions of the DOI Modified Prescription for Fishways, dated June 8, 2016, unless MDE, in conjunction with USFWS and FERC, agrees that an existing obligation in the Prescription may be removed or lessened. (Attachment C)
- c) The Certification Holder shall within 6 months following issuance of the New License submit a Fishway Effectiveness Monitoring Plan ("FEMP") to MDE for review and approval, so that MDE may ensure that the FEMP is consistent with Condition 5 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Fishway Effectiveness Monitoring Plan dated September 2021, attached hereto as Attachment D. The Certification Holder shall implement and comply with the FEMP as approved by MDE and as thereafter submitted to and approved by FERC. The FEMP as approved by MDE and FERC shall be made part of this Certification.
- d) The Certification Holder shall include MDE and Maryland DNR in annual discussions with USFWS and other SRAFRC entities regarding modifications to the FEMP. The Certification Holder shall submit to MDE any proposed modifications to the approved FEMP for review and approval prior to submission to FERC, so that MDE may ensure that the revised FEMP remains consistent with Condition 5 of this Certification. Upon approval of a revised FEMP by FERC, the Certification Holder shall implement and comply with the approved revised FEMP. Any modifications to the FEMP proposed by the Certification Holder and approved by FERC and MDE

shall be attached and made part of this Certification.

- e) The Certification Holder shall within 6 months following issuance of the New License submit a Fishway Operations and Maintenance Plan ("FOMP") to MDE for review and approval, so that MDE may ensure that the FOMP is consistent with Condition 5 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Fishway Operations and Maintenance Plan dated January 31, 2023, attached hereto as Attachment E. The Certification Holder shall implement and comply with the FOMP as approved by MDE and as thereafter submitted to and approved by FERC. The FOMP as approved by MDE and FERC shall be made part of this Certification.
- f) The Certification Holder shall include MDE and Maryland DNR in annual discussions with USFWS and other SRAFRC entities regarding modifications to the FOMP. The Certification Holder shall submit to MDE any proposed modifications to the approved FOMP for review and approval prior to submission to FERC, so that MDE may ensure that the revised FOMP remains consistent with Condition 5 of this Certification. Upon approval of a revised FOMP by FERC, the Certification Holder shall implement and comply with the approved revised FOMP. Any modifications to the FOMP proposed by the Certification Holder and approved by FERC and MDE shall be attached and made part of this Certification.
- g) The Certification Holder shall design new fishway(s) to ensure operation under River flows in the range of 6,330 cfs to 143,000 cfs. The Certification Holder shall not be required to operate the fishway(s) at flows greater than 113,000 cfs unless data available at the time demonstrates that operation of fishways at flows greater than 113,000 cfs is necessary to achieve the Target Efficiency.
- h) The fishways shall be designed with sufficient freeboard (or other protection) to minimize damage from River flows of up to the 50-year return interval.
- i) The Certification Holder shall provide written documentation to MDE that all fish lift operational personnel have reviewed and understand the FOMP, and it shall be signed by the operations manager of the Project. Copies of the approved FOMP and any modifications shall be provided to MDE on an annual basis.
- j) The Certification Holder shall complete work on the development of design plans to modify the East Fish Lift ("<u>EFL Modification Plan</u>") to satisfy obligations set forth in the DOI Modified Prescription for Fishways and Condition 5 of this Certification. The completion of the design plans shall be conducted in consultation with MDE and

USFWS.¹ The 90% design plans shall be submitted to MDE and USFWS for review and approval within 6 months of the date of issuance of the New License, prior to their submission to FERC for approval. The Certification Holder shall complete the physical improvements to the EFL as provided in a schedule for completion of the work approved by MDE, USFWS and FERC, provided timely issuance of all applicable Authorizations. The EFL Modification Plan and any subsequent approved modifications proposed by the Certification Holder and approved by FERC, USFWS, and MDE shall become a part of the Certification.

- k) The Certification Holder shall visually quantify, for each fish lift hopper, the fullness of each lift during operation of the East and West Fish Lifts. The Certification Holder shall report to MDE on the fifth anniversary of the New License, and every five years thereafter, on research into whether technology has become available to quantify the bucket "fullness" of each fish lift hopper and the costs associated with installation and maintenance of such technology.
- 1) The Certification Holder shall provide an annual report to MDE by January 31 of each year regarding implementation of the FOMP.
- m) The Certification Holder shall record in a database during the fish passage season the data collected for the annual FOMP report and provide MDE and Maryland DNR open access to the database in addition to the annual report. Data shall be entered into the database no later than one week after collection.
- n) For the modifications to existing fish lifts described herein, the Certification Holder shall minimize interruption of the fish lift operations and, to the extent possible, fish lift operation interruptions shall not be scheduled during the upstream fish migration period.

6) Lower River Fisheries Survey

a) The Certification Holder shall submit to MDE for review and approval a plan for surveying fish ("Lower River Fisheries Survey Plan") specifically targeting the State-threatened Chesapeake Logperch (*Percina bimaculata*) ("Logperch") at least 90 days prior to conducting the initial survey identified in (6)(b)(i). Upon approval by MDE, in consultation with Maryland DNR, the Certification Holder shall implement and comply with the Lower River Fisheries Survey Plan. The Lower River Fisheries Survey Plan and any subsequent modifications proposed by the Certification Holder and approved by FERC and MDE, shall be attached and made part of this

¹ As of the date of this Certification, the 30% and 60% design plans have been submitted to MDE and USFWS, which have reviewed and provided comments on the plans.

Certification.

- b) The Lower River Fisheries Survey Plan shall include:
 - i) a schedule for one survey to be conducted on or before the fourth anniversary of the issuance of the New License, and once during years 10, 20, 30 and 40 after license issuance;
 - ii) surveying fish in Reaches 1, 2, and 3, Figure 3.1-1 of RSP 3.10 (Attachment F) beginning June 15th and ending September 30th in the years they occur;
 - iii) surveys to be conducted by benthic electrical trawls, with an equal number of trawls and total button time as found in RSP 3.10; and
 - iv) collection of data including species, abundance, and effort (i.e., trawl seconds, number of trawls, number of trawls with Logperch detected).
- c) The Certification Holder shall, no later than December 31 of each year that the fisheries survey was conducted, submit a report to MDE including:
 - i) summary of the survey effort completed; and
 - ii) all data collected for the survey year provided as a MS Excel file.

7) Fish Stranding Minimization

- a) The Certification Holder shall within 6 months following issuance of the New License submit a Fish Kill Notification Plan to MDE for review and approval, so that MDE may ensure that the Fish Kill Notification Plan is consistent with, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Fish Kill Notification Plan dated March 2022, attached hereto as Attachment G. The Certification Holder shall implement and comply with the Fish Kill Notification Plan as approved by MDE and as thereafter submitted to and approved by FERC. The Fish Kill Notification Plan as approved by MDE and FERC shall be made part of this Certification.
- b) To mitigate the effect of fish strandings, the Certification Holder shall:
 - i) implement and maintain downramping restrictions as required by Condition 2(b) of this Certification; and
 - ii) make payments into Maryland DNR Special Fund 0326 as follows. The

Certification Holder shall pay Fifty-Thousand Dollars (\$50,000) on the sixth anniversary of the issuance of the New License, so long as that date occurs after the Payment Operative Date. The Certification Holder shall pay an additional Fifty-Thousand Dollars (\$50,000) on each anniversary of the issuance of the New License after the sixth anniversary, adjusted for inflation based on CPI, so long as those dates occur after the Payment Operative Date. If any of the above anniversary dates occur before the Payment Operative Date, the Certification Holder shall make those payments 60 days after the Payment Operative Date, so that a total of 45 payments will be made over the term of the New License.

- c) Within 24 months of issuance of the New License, the Certification Holder shall submit to MDE for review and approval a plan for surveying stranded fish in the River below the Dam ("Fish Stranding Survey Plan"). Upon approval by MDE, in consultation with Maryland DNR, the Certification Holder shall implement and comply with the Fish Stranding Survey Plan, attached and made part of this Certification. The Fish Stranding Survey Plan shall include the following survey periods and information:
 - i) surveys to be conducted consecutively during winter, spring, summer, and fall seasons, if and to the extent such surveys may be conducted in accordance with the Certification Holder's safety protocols, for a one-year period, which shall commence in the winter season following the first anniversary of the implementation of the Year 4 Flow Regime so that, if a survey cannot be conducted that winter season, a winter survey then may be conducted following the fall season survey, allowing a single four-season consecutive survey to be completed as part of the survey period;
 - accurate data records and estimates of the total number of fish stranded and dead in that seasonally and annually, including species and size class, to the extent possible given water clarity and visual observation survey methods;
 - iii) collection of air and water temperature and DO measurements;
 - iv) Project operating data at the Dam before and after all survey events; and
 - v) provisions for consultation with MDE and Maryland DNR to determine a potential alternative survey period different from that identified in Condition 7(d)(i) that results in the same data collection opportunities, unless waived by MDE during consultation, if the survey periods in Condition 7(d)(i) are interrupted due to inclement weather, or other

circumstances approved by MDE upon consultation.

- d) The Certification Holder shall submit a report six months after completion of the Fish Stranding Survey ("<u>Fish Stranding Survey Report</u>"). The Fish Stranding Survey Report shall include:
 - i) data and estimates of the total number of fish stranded and dead in each season of the survey and annually, including species and size class, to the extent possible given water clarity and visual observation survey methods;
 - ii) estimates of the number of avian predators present at the times of the survey;
 - iii) air and water temperature and DO measurements collected during each survey event; and
 - iv) Project operating data during each survey conducted, including the number of hydro-peaking events each season.
- e) The Certification Holder shall submit the results of the Fish Stranding Survey described in Condition 7(d) above to MDE and Maryland DNR within 90 days of completion of the survey, as an MS Excel file.

8) Eel Passage

- a) The Certification Holder shall within 12 months following issuance of the New License submit an American Eel Passage and Restoration Plan ("EPRP") to MDE for review and approval, so that MDE may ensure that the EPRP is consistent with Condition 8 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) American Eel Passage and Restoration Plan dated September 2021, attached hereto as Attachment H. The Certification Holder shall implement and comply with the EPRP as approved by MDE and as thereafter submitted to and approved by FERC. The EPRP as approved by MDE and FERC shall be made part of this Certification.
- b) The Certification Holder shall take actions to achieve a minimum annual survival rate of 95% for juvenile Eels during processes for collection, holding, and transportation. If these survival rates are not met in a given year, the Certification Holder shall consult with MDE, Maryland DNR, USFWS, and the Eel Passage Advisory Group ("EPAG"), review the reasons that the 95% survival rates were not achieved and, if necessary, develop revisions to the EPRP designed to increase survival rates to be implemented prior to the start of the Eel passage season in the following year.
- c) The Certification Holder shall maintain the upstream Eel passage trap and transport

program required by Section 12.6.1 of the DOI Modified Prescription for Fishways, and shall extend that trap and transport program for Eels through 2035, provided that USFWS agrees that volitional passage for Eels need not commence in 2031, with volitional passage to commence instead in 2036. For purposes of this Certification, volitional passage can be satisfied by trapping and transporting Eels into the Reservoir.

- d) The Certification Holder shall make an annual payment of \$100,000 to Maryland DNR Special Fund 0326, unless otherwise directed by MDE, with the amount adjusted for inflation based on CPI, beginning on July 1, 2036 and continuing on each anniversary of that date throughout the remainder of the Term of the New License, for the purpose of the restoration and enhancement of Eels.
- e) The Certification Holder shall continue to provide MDE and USFWS access to the Conowingo Eel collection facilities ("ECFs") consistent with Condition 21(g) (Right of Entry) for as long as any Eel ramp is operational.
- f) The Certification Holder shall consult with MDE annually by December 1 regarding that year's Eel passage results from all operational ECFs and consult with MDE regarding Eel collection for the following year and any proposed modifications to the EPRP.
- g) The Certification Holder shall ensure that all ECF components, including the Eel ramp, collection, overflow, and holding tanks, as well as the associated water lines are installed and tested according to the EPRP on or before April 30 of each year, in accordance with input received during consultation from the previous year with MDE per Condition (8)(f), during EPAG. If any component is not in working order or any element of the process for Eel passage is delayed, the Certification Holder shall notify MDE and Maryland DNR within 24 hours after testing identifies equipment failure. The Certification Holder shall provide a plan and schedule for necessary corrective actions to MDE for review and approval.
- h) The Certification Holder shall operate all ECFs at Conowingo Dam as required herein annually during the Upstream Eel Migration Season.
- i) The Certification Holder shall operate the ECFs continuously (24 hours per day, seven days per week to the extent feasible) during each Upstream Eel Migration Season throughout the Term, regardless of whether the ECFs are operated as a trap and transport or a volitional fishway.
- j) The Certification Holder shall ensure all collection tanks have continuous temperature, DO, and water flow monitoring devices with appropriate alarms if monitoring parameters fall below acceptable levels. Upon observation, the

Certification Holder shall remove, enumerate, and report dead Eels. The collection tank shall be designed and operated to hold Eels at densities not exceeding ten elvers per liter unless otherwise agreed to by the Certification Holder, MDE, Maryland DNR, USFWS, and FERC. When the collection tank density is ten elvers per liter more than three times during a season, collection tank capacity will be increased if deemed necessary by MDE and approved by FERC. The Certification Holder shall provide daily reports on collection activities to MDE and the Maryland DNR.

- k) If the number of Eels attempting to migrate within an ECF exceeds the maximum capacity of Eels per unit of ramp area, the Certification Holder shall redesign and construct the ECF to reduce crowding.
- 1) The Certification Holder's transport of juvenile Eels upstream shall occur as necessary based on the capacity of holding tank(s) at the ECFs. No Eels shall be held longer than one week. The holding tank(s) shall have continuous temperature, DO, and flow monitoring devices with alarms that sound in a daily staffed location if levels of any of these parameters are outside of limits as established in the approved EPRP.
- m) The Certification Holder shall transport Eels from the holding tank(s) to a vehicle equipped with an insulated transport container(s) that shall be covered and aerated. The transport vehicle(s) shall be designed and operated to hold Eels at densities not exceeding ten elvers per liter unless otherwise permitted by MDE in writing. Each transport vehicle shall have an automatically engaging backup pump and an alarm that sounds in the cab of the vehicle. The transport vehicle shall have continuous temperature and DO monitoring devices with alarms that sound in the vehicle cab if levels of any parameter are outside established limits.
- n) Eels shall be transported to appropriate release locations and released on the same day of removal from holding. Upon observation, dead Eels shall be removed, enumerated, and shall be included in the annual Eel report required by the EPRP.
- o) The Certification Holder shall twice yearly assess the numbers and density of Eels using the ECFs during periods when use is anticipated to be high (e.g., increases in discharge or turbidity) to determine if capacity is exceeded or if density or other conditions result in fallback or an inability of Eels to ascend the ramp. The results of said assessments shall be included in the annual Eel report required by the EPRP.
- p) The Certification Holder shall report to MDE on the first anniversary of the New License issuance, and every ten years thereafter, on technology available to assess the overall efficiency of upstream passage, including the success rate of Eels reaching the ramps and/or each of the ramp's passage efficiencies, and the costs associated with such technology. If the Certification Holder's report recommends a technology as

feasible and cost-effective for assessing overall Eel passage and/or ramp passage efficiencies at the ECFs, the Certification Holder shall submit to MDE and Maryland DNR for review and approval a plan for evaluating the overall Eel passage and/or ramp passage efficiencies at the ECFs ("<u>Upstream ECF Efficiency Study Plan"</u>). Upon approval of the Upstream ECF Efficiency Study Plan, the Certification Holder shall implement and comply with the plan, attached and made part of this Certification.

- q) As required by the DOI Modified Prescription for Fishways and as included in the FEMP, the Certification Holder shall submit a plan, including an implementation schedule, to conduct a silver Eel downstream survival study (the "<u>Downstream Survival Plan</u>") and submit the Downstream Survival Plan to MDE and Maryland DNR for review and consultation prior to submission to FERC. Upon FERC approval of the Downstream Survival Plan, the Certification Holder shall implement and comply with the Downstream Survival Plan and any FERC-approved subsequent modification, attached and made part of this Certification.
- r) The Certification Holder shall utilize stocking locations for collected Eels as determined annually with the Eel Passage Advisory Group ("EPAG"), which includes MDE, the Maryland DNR, the Pennsylvania Department of Environmental Protection (Pennsylvania DEP), Pennsylvania Fish and Boat Commission (Pennsylvania FBC), the Susquehanna River Basin Commission, and the USFWS, as described in the Muddy Run license. The Certification Holder shall implement and comply with the annual Eel Stocking Plan developed through consultation with the EPAG.

9) Freshwater Mussel Restoration

a) The Certification Holder, beginning within sixty (60) days after the Payment Operative Date and annually thereafter throughout the term of the New License, shall make payments to MDE to mitigate adverse impacts to freshwater mussels, including Eastern elliptio (*Elliptio complanata*), as a result of Project operations and discharges impacting the Reservoir and the River. The payments will be deposited into the Maryland Clean Water Fund, unless otherwise directed by MDE, for the purpose of aiding restoration of freshwater mussels in accordance with the payment schedule set forth in Table I. The payments in Table I shall be adjusted for inflation, based on CPI, with the base payment set as of the date of issuance of the New License. The first payment shall be due 60 days after the Payment Operative Date and adjusted based on CPI; additional payments (also adjusted based on CPI) shall be made on the Payment Operative Date if necessary so that the number of payments made on the Payment Operative Date equals the number of full years since issuance of the New License; and subsequent payments (adjusted based on CPI) shall be made annually thereafter

on the anniversary date of the Payment Operative Date until a total of 30 payments are made.

Freshwater Mussel Restoration TABLE I		
Year	Payment (Annual)	
1	\$3,000,000	
2	\$3,070,000	
3-30	\$350,000	

10) Aquatic Invasive Species

- a) If the Certification Holder, as well as other parties, enter into a voluntary agreement regarding aquatic invasive species ("AIS") through the Susquehanna River Migratory Fish and Aquatic Invasive Species Collaborative, the provisions of that agreement ("SRMFAIS Collaborative Agreement") shall replace Condition 10 (b-k) in this Certification upon the effective date of that agreement and following the submission of the agreement to FERC and FERC's approval of the agreement. The Certification Holder shall implement and comply with any such SRMFAIS Collaborative Agreement to which it and other parties have agreed, and any subsequent modifications proposed by the Certification Holder and approved by FERC shall be made part of this Certification.
- b) The Certification Holder shall participate in a meeting on or before December 15 annually with MDE, Maryland DNR, Pennsylvania DEP, Pennsylvania FBC, USFWS, and other state resource agencies as appropriate, to consult regarding whether the defined list of AIS should be expanded or changed. If the majority of participants in each annual meeting determine that the defined list of AIS should be expanded or changed, the Certification Holder shall comply as is reasonably practicable. In the event the list of AIS is expanded or changed, the obligations and limitations set forth in Conditions 10 (a) through 10 (l) including the required processes and financial obligations remain unchanged.
- c) The Certification Holder shall follow the provisions of the DOI Modified Prescription for Fishways for the first five fish passage seasons following issuance of the New License. If USFWS and FERC agree to suspend the provisions of the DOI Modified Prescription for Fishways and the New License regarding the volitional passage operations of the East Fish Lift (EFL), in an effort to prevent the passage of AIS into

- the Reservoir, to whatever extent the Certification Holder thereafter operates the EFL and West Fish Lift (WFL) in trap and transport mode during any of the first five fish passage seasons noted above, the Certification Holder shall segregate and tender to Maryland DNR for disposal all AIS captured at the EFL and WFL.
- d) The obligations in Condition 10(c) shall be satisfied when the Certification Holder expends Two-Hundred Thousand Dollars (\$200,000) in incremental costs as provided for in this Condition 10(d). The Two-Hundred Thousand Dollars (\$200,000) shall be adjusted for inflation, based on CPI, with the base amount set as of the date of issuance of the New License. The Certification Holder shall track the commercially reasonable incremental costs associated with segregating and tendering AIS to Maryland DNR, or their agent, which are costs beyond what the Certification Holder would incur if it operated the EFL and WFL in accordance with the provisions of the DOI Modified Prescription for Fishways. The Certification Holder shall provide monthly expenditure reports on these incremental costs to MDE and Maryland DNR within 10 days after the close of each calendar month during fish passage season. The Certification Holder shall provide MDE and Maryland DNR with thirty (30) days' notice of the date on which the Certification Holder anticipates it will reach the threshold of Two-Hundred Thousand Dollars (\$200,000) in incremental costs described above.
- e) As soon as the Certification Holder determines that Two-Hundred Thousand Dollars (\$200,000) will be expended prior to the end of the fish passage season per Condition 10(d) in connection with costs associated with segregating and tendering AIS to Maryland DNR, or their agent, and operating the EFL and WFL in trap and transport mode, the Certification Holder shall immediately seek approval from FERC to cease operations of the WFL and to direct all remaining funds to continued trap and transport operation of the EFL only, to prevent volitional passage of AIS. If the Certification Holder expends less than Two-Hundred Thousand Dollars (\$200,000) in a given fish passage season on the EFL and WFL, the Certification Holder shall make a payment of the remaining funds up to Two-Hundred Thousand Dollars (\$200,000), as adjusted for inflation, based on CPI, to the Maryland Clean Water Fund to support research into means to better identify, segregate, and remove AIS in connection with fish lift operations.
- f) Once the Certification Holder has expended Two-Hundred Thousand Dollars (\$200,000) in incremental costs and as adjusted for inflation, based on CPI, as noted in Condition 10 (d), the Certification Holder may operate the EFL and WFL in accordance with the provisions of the DOI Modified Prescription for Fishways. Passage of AIS in connection with volitional operation of the EFL into the Reservoir is permitted, and the Certification Holder is authorized to return AIS captured in the EFL and WFL to the Susquehanna River below the Dam, unless:

- i) The Certification Holder has successfully petitioned FERC, following a request to do so by MDE, in consultation with Maryland DNR, USFWS, Pennsylvania DEP, and Pennsylvania Fish and Boat Commission, to suspend operations at the EFL and WFL for the remainder of the season;
- ii) MDE agrees to extend credit to the Certification Holder from the payment obligations set forth in Condition 9 or Condition 12 of this Certification for any incremental costs as described above that exceed Two-Hundred Thousand Dollars (\$200,000), as adjusted for inflation, based on CPI;
- iii) MDE or Maryland DNR otherwise provides funds to the Certification Holder to pay the incremental costs as described above that exceed Two-Hundred Thousand Dollars (\$200,000), as adjusted for inflation, based on CPI; or
- iv) Condition 10 is superseded by an agreement reached by the SRMFAIS Collaborative per Condition 10 (a).
- g) For the remainder of the New License starting in the sixth fish passage year after the New License is issued the same conditions as set forth in Condition 10 (d-f) shall apply, except that wherever the dollar figure Two-Hundred Thousand Dollars (\$200,000) appears, it shall be replaced by \$66,000, as adjusted for inflation, based on CPI.
- h) If at any time during the effective period of the New License, technological advancements are developed and implemented by the Certification Holder upon approval by FERC, which replace existing AIS management processes (i.e., manual sorting and retaining AIS), the Certification Holder's incremental cost obligation shall be reduced from the amounts in Condition 10 (d) through Condition 10 (h) as agreed by the Certification Holder, MDE, and Maryland DNR.
- i) The Certification Holder shall, within sixty (60) days of an executed modification of the DOI Modified Prescription for Fishways to eliminate the Zone of Passage obligations and upon approval by FERC, pay One Million Dollars (\$1,000,000) into Maryland DNR Special Fund 0326, unless otherwise directed by MDE, for the purpose of supporting research into means to better identify, segregate, and remove AIS in connection with fish lift operations.
- j) With regard to tendering captured AIS to Maryland DNR, or their agent, the Certification Holder shall place all aquatic invasive fish species in a Maryland DNRprovided refrigeration unit for disposal. Maryland DNR or their agent, or USFWS, shall be responsible for disposing of the AIS and the costs thereof. If refrigeration space at the Project for storage of aquatic invasive species becomes limited, the

- Certification Holder shall notify MDE, Maryland DNR or their agent, and USFWS to ensure timely action.
- k) The Certification Holder shall notify Maryland DNR, Pennsylvania DEP, Pennsylvania FBC, and USFWS within 24 hours, or on an alternative schedule agreed upon by all parties in writing, if an aquatic invasive species is captured and removed in the WFL, captured and removed in the EFL, or passed from the East Fish Lift into Conowingo Reservoir. Notifications must include:
 - i) the species name and number of specimens observed or collected;
 - ii) the disposition of the aquatic invasive species observed or collected;
 - iii) the approximate size of aquatic invasive species observed or collected;
 - iv) the date and time of passage; and
 - v) the estimated flow through the Conowingo Dam at time of passage.
- 1) The Certification Holder shall annually obtain a Maryland DNR Scientific Collection Permit for project operations. The Certification Holder shall implement and comply with the conditions of that permit.

11) Dissolved Oxygen (DO) in the River Downstream of the Dam as Measured at Station 643

- a) The Certification Holder shall continue DO enhancement at the project using the existing turbine venting systems on units 1 through 7 and the aerating runners on units 2 and 5.
- b) The Certification Holder shall implement and comply with the obligations for monitoring DO at Station 643 located approximately 0.6 miles downstream of the power station in accordance with the requirements of the Project's Maryland State Discharge Permit No. 19DP0491 MD, NPDES Permit No. MD0002518, as may be renewed or extended consistent with the procedures set forth under Maryland law and regulations ("Discharge Permit").
- c) The Certification Holder shall implement and comply with the Fish Kill Notification Plan as set forth in Condition 7(a).
- d) If at any time during the New License term, the Project does not have a Discharge Permit in place, the Certification Holder shall submit to MDE for review and approval a plan and schedule for monitoring DO at Station 643 ("643 Monitoring Plan"). Upon approval of the 643 Monitoring Plan by MDE, the Certification Holder shall implement and comply with the Plan, and any subsequent modifications

proposed by the Certification Holder and approved by FERC and MDE, attached and made part of this Certification. The 643 Monitoring Plan shall provide for continuous monitoring of DO levels in the Tailrace at Station 643 from May 1st through October 31st of each year. If monitoring conducted under the 643 Monitoring Plan identifies DO levels below the applicable minimum as defined in COMAR 26.08.02.03-3A (2), the Certification Holder shall, within 30 days, notify MDE of the exceedance in writing.

12) Water Quality Mitigation Payment

a) The Certification Holder shall, beginning within sixty (60) days after the Payment Operative Date and annually thereafter throughout the term of the New License, make payments to MDE in accordance with the payment set forth in Table II below for mitigation of water quality impacts from the discharges and operation at the Dam. The payments will be deposited into the Maryland Clean Water Fund for the purpose of implementing water quality and resiliency improvement projects designed to benefit the Susquehanna River and the Chesapeake Bay, unless otherwise directed by MDE. The payments in Table II shall be adjusted for inflation, based on CPI, with the base payment set as of the date of issuance of the New License. The first payment shall be due 60 days after the Payment Operative Date and adjusted based on CPI; additional payments (also adjusted based on CPI) shall be made on the Payment Operative Date if necessary so that the number of payments made on the Payment Operative Date equals the number of full years since issuance of the New License: and subsequent payments (adjusted based on CPI) shall be made annually thereafter on the anniversary date of the Payment Operative Date until a total of 50 payments are made.

Water Quality Mitigation Payment Table II		
Year	Payment (Annual)	
1-5	\$1,215,000	
6-25	\$1,515,000	
26-29	\$800,000	
30-50	\$900,000	

13) Dissolved Oxygen and Chlorophyll-A Levels in the Reservoir

- a) The Certification Holder shall within 9 months following issuance of the New License submit a Chlorophyll-A Monitoring Plan to MDE for review and approval, so that MDE may ensure that the Chlorophyll-A Monitoring Plan is consistent with Condition 13 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Chlorophyll-A Monitoring Plan dated March 2023, attached hereto as Attachment I. The Certification Holder shall implement and comply with the Chlorophyll-A Monitoring Plan as approved by MDE and as thereafter submitted to and approved by FERC. The Chlorophyll-A Monitoring Plan as approved by MDE and FERC shall be made part of this Certification.
- b) The Chlorophyll-A Monitoring Plan shall provide for the collection of an additional two (2) years of data on Chlorophyll-A and DO levels in the Maryland portion of the Reservoir in accordance with Condition 13 (c).
- c) The Chlorophyll-A Monitoring Plan shall include at a minimum the following:
 - i) a sampling Quality Assurance Project Plan ("QAPP") that is consistent with MDE's "Quality Assurance Project Plan for Lake Nutrient Monitoring for Integrated Report Assessment and Total Maximum Daily Load Development" dated February 26, 2025 (Attachment J) and that includes procedures consistent with MDE's Tier III data quality collection criteria, MDE's assessment methodology, Guidelines for Interpreting Dissolved Oxygen and Chlorophyll a Criteria in Maryland Seasonally Stratified Water-Supply Reservoirs (Feb. 2012) and Environmental Protection Agency (EPA) documents Quality Assurance Project Plan Standard (2023) and Region 3 QAPP Standard Template Final (Attachment K);
 - ii) The Certification Holder shall consult with MDE at least 90 days prior to submitting the QAPP to MDE for review and approval on any specific laboratory procedures or data quality procedures that differ from those specified in MDE's "Quality Assurance Project Plan for Lake Nutrient Monitoring for Integrated Report Assessment and Total Maximum Daily Load Development" dated February 26, 2025, specifically the MDE Standard Operating Procedures referenced in the appendices;
 - iii) sampling locations consisting of the following eight stations in the table below as included in the Revised Chlorophyll-A Monitoring Plan dated March 2023 Chlorophyll-A Monitoring Plan (March 2023); and

Chlorophyll-A Monitoring Plan (March 2023)				
Station ID	Latitude	Longitude	Description	
XLG0091	39.667000	-76.182700	Mid-Channel. Close to Conowingo Dam.	
XLG0880	39.680600	-76.201400	Mid-Channel. Across from Conowingo Creek.	
XLG2166	39.702400	-76.224300	Mid-Channel. Across from Broad Creek.	
Conowingo-1	39.659940	-76.176750	New station, nearest dam (at least 400 yards upstream of the dam for safety).	
Conowingo-2	39.686350	-76.215320	New station, upstream of Glen Cove Marina.	
Conowingo-3	39.711750	-76.239780	New station, west side of Conowingo Reservoir, upstream of Broad Creek confluence.	
Conowingo-4	39.698280	-76.210160	New station, east side of Conowingo Reservoir, upstream of Conowingo Creek.	
Conowingo-5	39.720510	-76.232880	Mid-Channel. Just below the MD/PA border.	

iv) frequency of monitoring to include:

- a) sampling from April of the first year of the additional two-year study period through October of the second year of the additional two-year study period, with frequency of sampling per month as set forth below;
- b) monthly sampling from November to March, subject to the consultation requirements stated in 13(c)(ii) and provided that, in all instances, sampling need only occur if it can be conducted in accordance with the Project's safety protocols given River conditions;
- c) bimonthly (twice per month) sampling from April through October, during each year of the additional two-year study period; and
- d) provisions for consultation with MDE to determine an alternative monitoring frequency or schedule for the periods identified in

Condition 13(c)(iv)(a-b), unless waived by MDE during consultation, if the sampling periods are interrupted due to inclement weather, or other circumstances approved by MDE upon consultation.

v) sampling parameters to include:

- a) Field parameters:
 - i) measurements of physical parameters including pH, salinity, temperature, DO, and conductivity will be collected as profiles at multiple depths *in situ* using a multiparameter water quality instrument at each sampling site.
 - ii) both a turbidity measurement and Secchi disc depth will be recorded at each location.
- b) Laboratory parameters:
 - i) Chlorophyll-A. Surface grab samples for Chlorophyll-A will be collected at each sampling location by boat during daylight hours (between 9:00 AM and 3:00 PM).
 - ii) Nutrients: NO2 (nitrite), NO3 (nitrate), P (phosphorus), NH4 (ammonium), Total Dissolved Nitrogen, Total Dissolved Phosphorus.
 - iii) collection and analysis as specified in the approved QAPP.
- d) The Certification Holder shall provide MDE with:
 - i) annual reports of all measured field and lab parameters, and dates and locations of monitoring in the Maryland portion of the Reservoir by December 31 of the year in which the monitoring occurred;
 - ii) a final report that analyzes and presents the results of all measured field and lab parameter monitoring submitted by June 30 of the year after the final year of monitoring; and
 - iii) an attachment to the final report that includes the two years of data required by this Certification in the MDE-provided MS Excel data template (<u>Attachment L</u>) to enable independent analysis and a summary of the data collected for the two years of sampling conducted in accordance

with this Certification and the 3 years of data collected in accordance with the Certification Holder's previously submitted Chlorophyll-A Monitoring Plan dated November 2021 and Revised Chlorophyll-A Monitoring Plan dated March 2023.

e) The Certification Holder shall not be required to expend more than Fifty-Five Thousand Dollars (\$55,000) per year to complete the monitoring and reporting obligations in Condition 13, which shall be adjusted annually for inflation based on CPI, in connection with the costs of implementing the Updated Revised Chlorophyll-A Monitoring Plan and any associated annual reporting. If the Certification Holder is unable to perform all the requirements under Condition 13, they shall be required to furnish, to MDE, a detailed estimate that provides the itemized costs of this sampling effort. MDE will then determine, in consultation with the Certification Holder, which portions of the sampling plan will not be completed.

14) Trash and Debris

- a) The Certification Holder shall within 6 months following issuance of the New License submit a Debris Management Plan to MDE for review and approval, so that MDE may ensure that the Debris Management Plan is consistent with Condition 14 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Debris Management Plan, Revision dated October 2021, attached hereto as <u>Attachment M</u>. The Certification Holder shall implement and comply with the Debris Management Plan as approved by MDE and as thereafter submitted to and approved by FERC. The Debris Management Plan as approved by MDE and FERC shall be made part of this Certification.
- b) The Debris Management Plan shall include:
 - i) a description of the debris management program, including:
 - 1) debris management goals;
 - 2) a description of debris management methods;
 - 3) timeframes for when debris will be collected and the frequency of removal operations;
 - 4) specific size criteria for target floating debris;
 - 5) a description of best management practices for the storage of the debris materials at Hopkins Cove and other Certification Holder-owned lands

- within the Project boundary; and
- 6) procedures for removal of stored debris, and procedures for tracking debris storage and removal.
- ii) a provision for a public hotline for boaters to link directly to the Certification Holder to report areas of hazardous debris;
- iii) a provision to employ clamming or any other equally or more effective measures to remove 450 loads of trash and debris per year, in the Reservoir and as accumulated at the Dam as the first order of priority, unless there is an insufficient amount of trash and debris accumulated at the Dam or in the Reservoir to make it reasonably practicable to remove 450 loads. A "load" consists of the maximum volume of trash and debris that can be safely transported in a standard 20-cubic yard dumpster;
- iv) a provision for prioritizing removal of trash and debris directly behind the Dam and for responding to any complaint from a marina operator or a public boat ramp monitor, such as the Maryland DNR;
- v) a provision requiring trash and debris removal to begin each calendar year before Memorial Day;
- vi) a provision to monitor and record the duration of the trash and debris removal events (number of hours), and the amount of debris and trash removed and subsequently disposed of during each clamming/trash and debris removal event (in cubic yards) and submit the data to MDE in the annual report required in Condition 14 (b) (xiii) of this section;
- vii) a provision for temporary storage of trash and debris prior to final disposal or recycling;
- viii) provisions for sorting, recycling and disposal of trash and debris. Nonorganic debris shall be disposed of through a licensed vendor, and any hazardous material shall be disposed of pursuant to the appropriate safety provisions and regulations;
- ix) a provision requiring the Certification Holder to promptly respond to any complaint from a marina operator or a public boat ramp monitor, such as Maryland DNR, regarding accumulated trash and debris at Project facilities that interfere with recreational uses in the Reservoir by removing to the extent reasonably practicable and safe any such debris interfering with recreational activities between Memorial Day and November 15. The

Certification Holder must maintain, for review by MDE staff, records of complaints filed (name, date, location, nature of the trash and/or debris at issue and amount) and corrective actions taken (date, time, description of action, and amount of trash and/or debris removed). The Certification Holder will also provide a public hotline for boaters to link directly to the Certification Holder to report hazardous debris. The Certification Holder will provide the public with the Conowingo Visitor Center phone number via its website and recreation site kiosks;

- x) a provision to sponsor at least two annual community-based cleanups of Conowingo Reservoir, tributaries upstream of the Project that feed Conowingo Reservoir, and/or the Susquehanna River and tributaries downstream of the Project, which may be in coordination with Lower Susquehanna Riverkeeper Association and Waterkeepers Chesapeake. The Certification Holder must advertise each event, provide all needed supplies, and be responsible for the disposal of the materials collected.
- a provision specifying that, after any storm event which results in trash and debris blocking water supply intakes in the Susquehanna River downstream of the Conowingo Dam, within the Project boundary, the Certification Holder must ensure that blockage is removed as soon as it is safe to enter the water;
- xii) a provision for hurricanes, tropical storms, and tropical depressions, as these events as defined by the National Weather Service for the Atlantic Basin create challenges to the safe passage of flows in excess of plant capacity and debris management from sources upstream of Conowingo Dam. In such instances, the Certification Holder shall conduct event-specific assessments of the risk of a major flow event and update the assessment daily. The Certification Holder would evaluate the debris present in conjunction with the risk assessment to determine whether prestorm debris removal can be conducted safely and notify MDE accordingly; and
- xiii) a provision for an annual report to be filed with MDE by April 1 throughout the Term, summarizing the previous year's debris removal efforts in accordance with this Certification, including the amount and types of trash and debris managed, hotline calls, action items and outcomes.
- c) The Certification Holder is not required to remove more than 450 loads of trash and debris in any year, excluding the debris removed as required in Condition 14 (b)(x).

- d) The Certification Holder shall submit any proposed further modification to the Debris Management Plan to MDE for review and approval, prior to submission to FERC, so that MDE may ensure that further modification remains consistent with Condition 14 of this Certification. The Certification Holder shall implement and comply with any subsequent approved modified Debris Management Plan.
- e) The Certification Holder shall report once every seven years, as a supplement to its annual report for that year as required by Condition 14 (b) (xiii), on research into alternative or innovative practices to support removal of trash and debris, and for any reliable and feasible practices that it recommends to pursue, and provide an analysis of and costs associated with installation, operation and maintenance of any such recommended practices. The Certification Holder may seek any necessary state and federal approvals to install such technology, when recommended to be feasible based on the report.

15) Sediment Management Plan

- a) The Certification Holder shall within 12 months following issuance of the New License submit a Sediment Management Plan to MDE for review and approval, so that MDE may ensure that the Sediment Management Plan is consistent with Condition 15 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Sediment Management Plan dated August 2012 and Revised September 2021, attached hereto as Attachment N. The Certification Holder shall implement and comply with the Sediment Management Plan as approved by MDE and as thereafter submitted to and approved by FERC. The Sediment Management Plan as approved by MDE and FERC shall be made part of this Certification.
- b) The Certification Holder shall conduct a bathymetric survey of Conowingo Reservoir every five years to monitor sediment transport and depositional patterns within the Reservoir beginning the first year upon issuance of the New License. The results of each bathymetric survey must include an analysis of any change in sediment deposition or scour in the Reservoir from the previous survey(s), including the 2011 survey, so that any changes in sediment depositional or scour patterns in the Reservoir over time since the 2011 survey can be monitored.
- c) The Certification Holder shall submit to MDE each bathymetric survey within six months of completion in the annual reporting year it is due for completion.

16) Shoreline Management Plan

- a) The Certification Holder shall within 12 months following issuance of the New License submit a Shoreline Management Plan ("SMP") to MDE for review and approval, so that MDE may ensure that the SMP is consistent with Condition 16 of this Revised Certification and, to the extent relevant and applicable, the Project's previously submitted Shoreline Management Plan dated August 31, 2012, revised September 2021, attached hereto as Attachment O. The Certification Holder shall implement and comply with the SMP as approved by MDE and as thereafter submitted to and approved by FERC. The SMP as approved by MDE and FERC shall be made part of this Certification.
- b) The SMP shall be reviewed and updated every ten years from the date of the last approval.
- c) The Certification Holder shall submit to MDE any modifications to the SMP for review and approval prior to submission to FERC, so that MDE may ensure that the proposed revised SMP remains consistent with Condition 16 of this Certification. Upon approval of a revised SMP by FERC, the Certification Holder shall implement and comply with the approved revised Shoreline Management Plan.
- d) Non-Project use of Project Land. If the Certification Holder intends to make any non-Project use of any Project land, or receives any request from a third party for non-Project use of any Project land, the Certification Holder shall:
 - prepare, or require the third-party requester to prepare, a written assessment of the impacts on water quality of the proposed use;
 - ii) provide this assessment to MDE for MDE's review to determine whether the proposed use is consistent with water quality standards; and
 - iii) consult with MDE regarding the proposed use.
- e) <u>Shoreline Vegetation Management.</u> If the Certification Holder intends to make any modifications to the shoreline vegetation for viewshed maintenance, development, or recreation access within the Project boundary, the Certification Holder shall:
 - i) prepare a written assessment of the impacts to water quality from the proposed modifications;
 - ii) provide this assessment to MDE for a review and determination regarding whether the proposed modifications are consistent with water quality standards; and

- iii) not undertake any such modifications until MDE notifies the Certification Holder in writing that it has no objections to such proposed use.
- f) Sensitive Natural Resources Protection Overlay and Policies. The Certification Holder shall consult with MDE regarding any proposed modification of an existing use of Project lands in cases where such use may affect any sensitive aquatic resources identified by the Certification Holder in the "sensitive resources overlays" included in the SMP.

17) Bog Turtle (Glyptemys muhlenbergii) Protection Plan

- a) The Certification Holder shall within 6 months following issuance of the New License submit a Bog Turtle Protection Plan to MDE for review and approval, so that MDE may ensure that the Bog Turtle Protection Plan is consistent with Condition 17 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Bog Turtle Protection Plan dated July 2022, attached hereto as <u>Attachment P</u>.² The Certification Holder shall implement and comply with the Bog Turtle Protection Plan as approved by MDE and as thereafter submitted to and approved by FERC. The Bog Turtle Protection Plan as approved by MDE and FERC shall be made part of this Certification.
- b) The Certification Holder shall maintain a Bog Turtle Protection Plan that requires the protection and enhancement of the bog turtle population associated with Project lands, including at a minimum:
 - a map of the wetland(s) documented to support bog turtles, and a record of bog turtle sightings in and around the wetland(s) within the project boundary;
 - ii) the restriction of mowing in the wetland(s) documented to support bog turtles;
 - iii) invasive plant and woody plant control, particularly reed canary grass (*Phalaris arundinacea*), in the areas around the wetland(s) documented to support bog turtles;
 - iv) limits on public access to the wetland(s) documented to support bog turtles without advertising the reason; and

² This protection plan is being withheld from attachments as privileged information because it contains confidential information regarding a federally and state-protected species and should not be released to the public.

 a provision stating that, before any ground-disturbing work begins on Project lands, the Certification Holder must review the USFWS Chesapeake Bay Field Office and Pennsylvania Field Office websites, and coordinate with Maryland DNR for any updates to the bog turtle management guidelines.

18) Northern Map Turtle (Graptemys geographica) Protection Plan

- a) The Certification Holder shall within 12 months following issuance of the New License submit a Northern Map Turtle Protection Plan to MDE for review and approval, so that MDE may ensure that the Northern Map Turtle Protection Plan is consistent with Condition 18 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Northern Map Turtle Protection Plan dated March 2022, attached hereto as Attachment Q.³ The Certification Holder shall implement and comply with the Northern Map Turtle Protection Plan as approved by MDE and as thereafter submitted to and approved by FERC. The Northern Map Turtle Protection Plan as approved by MDE and FERC shall be made part of this Certification.
- b) The Certification Holder shall maintain a Northern Map Turtle Protection Plan ("Map Turtle Plan") that requires the protection and enhancement of the northern map turtle population associated with Project lands, including at a minimum:
 - i) annual monitoring of the northern map turtle population at the project for ten consecutive years, followed by population monitoring every five years;
 - ii) a study to determine the amount of artificial basking habitat needed over the normal range of generation flows to support current and future populations of northern map turtles within the Reservoir and all areas of the Susquehanna River downstream of the Conowingo Dam within the Project boundary affected by generation flows;
 - iii) a study to determine the proper locations for deployment of artificial basking platforms;
 - iv) nest management and protection measures;
 - v) annual monitoring of the use and success of both the mitigation and protection measures; and

³ This protection plan is being withheld from attachments as privileged information because it contains confidential information regarding a federally and state-protected species and should not be released to the public.

vi) an assessment of the northern map turtle's response to changes in operating practices at the project that are required by this Certification or the New License.

19) Waterfowl Nesting Protection Plan

- a) The Certification Holder shall within 6 months following issuance of the New License submit a Waterfowl Nesting Protection Plan to MDE for review and approval, so that MDE may ensure that the Waterfowl Nesting Protection Plan is consistent with Condition 19 of this Revised Certification and, to the extent relevant and applicable, the previously submitted Conowingo Hydroelectric Project (FERC Project No. 405) Waterfowl Nesting Protection Plan dated March 2022, attached hereto as Attachment R.. The Certification Holder shall implement and comply with the Waterfowl Nesting Protection Plan as approved by MDE and as thereafter submitted to and approved by FERC. The Waterfowl Nesting Protection Plan as approved by MDE and FERC shall be made part of this Certification.
- b) The Certification Holder shall maintain a Waterfowl Nesting Protection Plan that includes, at a minimum:
 - i) a provision to verify specific Project-related effects on nesting waterfowl, such as Project-related water level fluctuations during the nesting season;
 - ii) a provision to verify which species of nesting waterfowl (as well as the black-crowned night-heron (*Nycticorax nycticorax*), a wading bird species) are affected by the Project, if any;
 - iii) a provision to describe appropriate protection or mitigation measures, if new Project-related effects are identified; and
 - iv) a provision for an assessment of the impacts of such protection and mitigation measures on water quality.

20) Sturgeon Protection Plan

federal governmental agency) the Certification Holder shall submit to MDE and Maryland DNR for review and MDE's approval a Sturgeon Protection Plan, so that MDE may ensure that the Sturgeon Protection Plan is consistent with Condition 20 of this Revised Certification. The Certification Holder shall implement and comply with

a) Within 12 months following issuance of the New License (or sooner, if required by a

⁴ This protection plan is being withheld from attachments as privileged information because it contains confidential information regarding a federally and state-protected species and should not be released to the public.

the Sturgeon Protection Plan as approved by MDE, and as thereafter submitted to and approved by FERC and NMFS, the Sturgeon Protection Plan, and any subsequent modifications proposed by the Certification Holder and approved by FERC, NMFS and MDE, shall be attached hereto and made part of this Certification.

b) The Sturgeon Plan shall include:

- i) provisions to monitor and report to Maryland DNR stranded sturgeon in the River within Project boundaries within 48 hours;
- ii) procedures for trapping, handling, and safely returning sturgeon lifted at any fish lift to the Tailrace; and
- iii) monitoring of water quality in any tanks used to hold sturgeon.

21) GENERAL CONDITIONS

a) Confidentiality

The Certification Holder may request in writing, at the time of submission of any document pursuant to this Certification, that confidential information, including but not limited to confidential business information, not be disclosed. Any such information shall be clearly marked as confidential. MDE will withhold information clearly marked as confidential to the extent permitted by law, including the Maryland Public Information Act. In the event MDE receives a request for disclosure of such information under the Maryland Public Information Act or other applicable law, MDE shall notify the Certification Holder no less than ten (10) days prior to disclosure if MDE determines it is required to disclose such information.

b) Web Portal

- i) The Certification Holder shall maintain at all times during the Term a web site or page ("Web Portal") specifically designed to provide the public with access to the non-confidential information required to be produced to MDE by this Water Quality Certification. The Certification Holder shall:
 - provide all data and final reports, including monitoring results, collected or developed pursuant to any Plan required by this Certification to MDE in electronic format;
 - 2) make all such non-confidential data and final reports publicly available on a Web Portal;

- 3) make all final Plans required by this Certification publicly available on a Web Portal contemporaneously with submission thereof to MDE; and
- 4) make all final approved Plans publicly available on the Web Portal.
- ii) The Certification Holder shall post any non-confidential annual reports required for submission to MDE under this Certification on the Web Portal contemporaneously with the submission of the report to MDE.

c) Plans

- i) Where MDE has the right under this Certification to approve a Plan specified in this Certification, MDE may approve such Plan, in whole or in part, or decline to approve it and provide written comments to the extent necessary to ensure that the Plan meets the elements required in this Certification. MDE may also request additional information to the extent necessary to evaluate the completeness of the Plan in meeting the elements required in this Certification. The Certification Holder shall consult with MDE at least 30 days prior to submission of any such Plan about the subject matter thereof. To be effective, any approval by MDE hereunder must be provided in writing.
- ii) MDE may solicit public comments and may hold, or require the Certification Holder to hold, one or more public informational meetings with respect to any Plan for which MDE approval is required. MDE may consult and share relevant information with and may require the Certification Holder to consult and share relevant information with, other governmental entities or third parties having particular expertise in connection with the review, implementation, and/or oversight of any such Plan, including Maryland DNR, USFWS, NMFS, the Susquehanna River Basin Commission and the Eel Passage Advisory Group. In connection with each Plan for which MDE approval is required, the Certification Holder shall provide MDE with:
 - 1) documentation regarding consultation with other governmental entities and third parties;
 - 2) an explanation of how the proposed Plan addresses comments or recommendations from governmental entities or third parties; and
 - 3) an explanation of why any such comments or recommendations are

not addressed in the proposed Plan.

- Upon approval by MDE in writing and, to the extent applicable, by other resource agencies and FERC, the Plan shall be incorporated into this Certification, and the Certification Holder shall comply with the Plan as approved. In the event a Plan modifies a prior-approved Plan, the most recent version of the Plan is incorporated into this Certification and shall govern.
- iv) In the event of MDE's disapproval, in whole or in part, of any Plan, MDE shall specify any deficiencies in writing to the Certification Holder. The Certification Holder shall respond to the deficiencies within 30 days from receipt of disapproval by MDE unless MDE grants an extension. Upon consideration of the Certification Holder's response, MDE may approve the Plan, in whole or in part, or decline to approve it.
- v) If the Certification Holder takes exception to all or part of MDE's disapproval of any Plan for which MDE approval is required, representatives of MDE and the Certification Holder shall confer in person or virtually in an attempt to resolve any disagreement. If a resolution is reached, that resolution shall be in writing and signed by representatives of each party. In the event that resolution is not reached within 15 days, or such reasonable extension of time as determined by MDE, MDE shall issue a final decision disapproving of the Plan in whole or in part. The Certification Holder may challenge any final decision by MDE in connection with any Plan in accordance with applicable State Law. The Certification Holder shall have the right to file any Plan with FERC as may be required to comply with the New License or applicable Law; provided, if MDE has not yet approved a Plan for which MDE approval is required in accordance with this Certification, the Certification Holder shall (i) first exhaust all opportunities to seek extensions of time for the filing of such Plan with FERC, as necessary to enable the Parties to fully comply with this Certification; and (ii) clearly state in any such filing with FERC that MDE has not yet approved the Plan.
- vi) The Certification Holder shall submit notification of MDE approval of any Plan required by this Certification to be approved by MDE to FERC as a means of demonstrating compliance with the terms of this Certification and as appropriate to comply with the FERC License.

d) Other Authorizations

i) This Certification does not relieve the Certification Holder of the

responsibility to obtain any other authorizations or approvals related to the Project that are required by Law, or to comply with all conditions of such authorizations or approvals.

e) Construction and Interpretation

i) All references herein to Conditions or Attachments are references to Conditions of or Attachments to this Certification, unless otherwise indicated. All Attachments to this Certification are deemed to be incorporated by reference and made a part of this Certification. All documents incorporated by reference into this Certification that are not attached hereto are qualified by the provisions, requirements and conditions of this Certification. Whenever the words "include," "includes," or "including" are used in this Certification, they shall be deemed to be followed by the words "without limitation." All references herein to temperatures are expressed in degrees Celsius, unless otherwise noted. All references herein to "days" are calendar days unless otherwise noted. All references herein to governmental entities are to such governmental entities and any successor(s) thereto.

f) Record Keeping

- i) All records and information resulting from the monitoring, sampling, record keeping, inspection, and reporting activities required by this Certification shall be retained for fifteen years. For any measurements or sampling taken to satisfy the requirements of this Certification, the Certification Holder shall record:
 - 1) the exact place, date, and time of sampling or measurement;
 - 2) the person(s) who performed the sampling or measurement;
 - 3) the dates and times the analyses were performed;
 - 4) the person(s) who performed the analyses;
 - 5) the analytical techniques or methods used; and
 - 6) the results of all required analyses. The sampling and analytical methods used shall conform to procedures for the analysis of pollutants as identified in 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants" unless otherwise specified by MDE in writing in an approved Plan.

g) Right of Entry

- i) In addition to any other right of entry provided for by law, MDE, or its authorized representatives, shall have the right to enter at reasonable times the premises or property that is the subject of the Certification (including the Reservoir and all land within Project boundaries) or where any records are required to be kept under the provisions, requirements, and conditions of this Certification.
- ii) Upon arrival, MDE, or its authorized representatives, shall provide reasonable notice to the Certification Holder or its representatives of the purpose of the visit and any activities that may be conducted.
- iii) This right of entry shall include the right to:
 - access and copy, at reasonable times, any records that are required to be kept under the provisions, requirements, and conditions of this Certification;
 - 2) inspect, at reasonable times, any monitoring equipment or monitoring method required in this Certification;
 - 3) inspect, at reasonable times, any discharge facilities subject to this Certification;
 - 4) conduct sampling, at reasonable times, of any discharge or of the water column in the River or Reservoir;
 - 5) take soil or sediment borings or core samples, at reasonable times, and with the provision of at least 45 days notice to the Certification Holder to ensure non-interference with buried cables and Project operations and the existence of appropriate safety and other protocols, in the bed of the River or the Reservoir, unless an emergency exists and notice requirements need to be shortened in coordination with the Certification Holder; and
 - 6) take photographs.

h) Duty to Provide Information

i) The Certification Holder shall submit to MDE all information requested by MDE that is required, within the time frame reasonably stipulated by MDE, to determine compliance with this Certification. The Certification Holder shall also submit to MDE, upon request, copies of any records required to be kept by this Certification.

i) Property Rights

i) The issuance of this Certification does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of federal, State, or local Laws.

j) Notice/Reporting of Noncompliance

i) Unless MDE provides different instructions in writing from time to time, any notice or other submission due to MDE under this Certification shall be provided in writing to:

Program Manager
Wetlands and Waterways Protection Program
Maryland Department of the Environment
Water and Science Administration
1800 Washington Boulevard
Baltimore, Maryland 21230

For any violations of the provisions, requirements, or conditions of this Certification, the Certification Holder shall promptly notify MDE by telephone within 24 hours of discovery of the violation, at 410-537-3510. In addition, within seven days, the Certification Holder shall provide MDE with the following information in writing (which may be delivered via email):

- 1) a description of the noncompliance, including the date, time, location, and estimated discharge volume (if applicable), and impact on receiving water;
- 2) the cause of the noncompliance, to the extent known;
- 3) the anticipated time the cause of the noncompliance is expected to continue, or, if the condition has been corrected, the duration of the period of the noncompliance;
- 4) steps taken by the Certification Holder to eliminate or correct the violation; and

5) steps planned or implemented by the Certification Holder to prevent the recurrence of the noncompliance.

k) No Waivers

i) MDE's failure to enforce any provision, requirement, or condition of this Certification shall not constitute a waiver of MDE's right to enforce any such provision, requirement, or condition, or otherwise relieve the Certification Holder from compliance with any obligations imposed by this Certification.

l) <u>Transfer</u>

i) The Certification Holder shall notify MDE in writing upon transferring property ownership or responsibility for compliance with these conditions to another person. The new owner/operator shall request in writing the transfer of this Certification to its name.

m) Severability

i) The provisions of this Certification are severable. If any provision of this Certification is held invalid for any reason, the remaining provisions shall remain in full force and effect.

n) Term

i) This Certification is valid for the Project identified herein and the associated federal permit or license for the Conowingo Hydroelectric Project (FERC Project P-405) until such time that it expires.

CERTIFICATION APPROVED:

D. Lee Currey, Director
Water and Science Administration

Statements of Necessity Attachments

cc: WSA Inspection & Compliance Program

STATEMENTS OF NECESSITY AND CITATIONS

1. <u>Statement of Necessity for Special Conditions 1-20</u>: These conditions are necessary to ensure that water quality standards are met.

Citations: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; 26.17.04; COMAR 26.23; COMAR 26.23.02.06; COMAR 26.08.02.02B; COMAR 26.08.02.03 and COMAR 26.08.02.03-3; 26.08.02.03B(1)(b)

2. <u>Statement of Necessity for Special Conditions 2, 3, and 5(a)</u>: These conditions are necessary to ensure that discharges will meet water quality standards for growth and propagation of fish, other aquatic life, and wildlife.

<u>Citations</u>: COMAR 26.08.02.02B; 26.08.02.03; COMAR 26.08.02.03-3; 26.08.02.03B(1)(b); 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a)

3. Statement of Necessity for Special Conditions 2(c), 2(d), 2(f), 2 (g), 2(k), 2(l), 2(m), 2(o), 3, 4, 5(a), 5(b), 5 (c), 5 (d), 5(e), 5(f), 5 (g), 5(h), 5(i), 5(j), 5(k), 5(n), 5(m), 6(a), 6(b), 7, 8(r), 8(q), 10(a), 10(j), 10(k), 10(l), 11(c), 11(d), 16(f), 16(g), 17(a), 17(b), 18(a), 19(a), 19(b), and 20: These conditions are necessary to ensure that water quality standards for growth and propagation of fish, other aquatic life, and wildlife are met.

<u>Citations</u>: COMAR 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a)

4. <u>Statement of Necessity for Special Conditions 2(h), 2(i), 2(j):</u> These conditions are necessary to ensure compliance with other federal and state laws to ensure water quality standards are met.

<u>Citations</u>: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16.

5. Statement of Necessity for Special Conditions 2(g), 2(l), 2(m), 2(n), 2(o), 3(e), 4(c), 4(d), 5(k), 5(l), 6(c), 7(a), 7(b), 7(c), 7(d), 7(e), 8(d), 8(o), 8(p), 9(a), 10 (c), 10 (d), 10(e), 10 (f), 10(g), 10(h), 10(i), 11(d), 12(a), 13(d), 13(e), 14(e), 15(c), 15(d), 16(b), 20(b): These conditions are necessary to ensure that approved management, monitoring, and equipment plans, implemented by the Certification Holder for discharges meet water quality standards and water quality standards for the growth and propagation of fish, other aquatic life, and wildlife are met.

<u>Citations:</u> COMAR 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.03; 26.08.02.03A; 26.08.02.03B(1)(b); 26.08.02.03-3; 26.08.02.03C-1(1); 26.08.02.03-3C(8)(b); 26.08.02.03-3C(10); 26.08.02.03-3C-1(1); 26.08.02.03-3B(1); 26.08.02.03-3C-1(1); 26.08.02.03-3C(5)

- 6. Statements of Necessity for Special Conditions 5(n), 8(a), 8(b), 8(c), 8(e), 8(g), 8(h), 8(i), 8(j), 8(k), 8(l), 8(m), 8(q), 8(r): These conditions are necessary to meet water quality standards as follows:
 - a) to ensure that discharges will be conducted in a manner which meets water quality standards:
 - b) to meet water quality standards for growth and propagation of fish, other aquatic life, and wildlife; and
 - c) to meet water quality standards for support of estuarine and marine aquatic life and shellfish harvest.

<u>Citations:</u> COMAR 26.08.02.02-1; 26.08.02.03B(1)(b); 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.02B(3)(a); 26.08.02.02B(4)(a)

7. Statement of Necessity for Special Conditions 4(a), 4(b), 4(c), 8(o), 8(p), 11(b), 13(a), 13(b), 13(c), 13(d), 13(e), 14(a), 14(b), 14(d), 14(e), 15(c), 15(d), 16(d), 16(e), 20(b), 21(b): These conditions are necessary to ensure that approved management, monitoring, and equipment plans, implemented by the Certification Holder ensure discharges comply with water quality standards for the growth and propagation of fish, other aquatic life, and wildlife and numeric criteria of water quality standards are met.

<u>Citations</u>: COMAR 26.08.02.03B(1)(b); 26.08.02.03-3C(10); 26.08.02.03-3C-1(1);26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.03B(2)(d); 26.08.02.03B(2)(e); 26,08.02.02B(1)(a); 26.08.02.02B(1)(b); 26.08.02.03-3A(5); 26.08.02.03-3B(1); 26.08.02.03-3C-1(1); 26.08.02.03-3C(5)

8. <u>Statement of Necessity for Special Condition 11(a), 11(c), 11(d)</u>: These conditions are necessary to ensure that water quality standards for the growth and propagation of fish, other aquatic life, and wildlife are met, and numeric criteria of water quality standards are met.

<u>Citations:</u> 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.03-3A(2); 26.08.02.03-3B(1); 26.08.02.03-3C-1(1); 26.08.02.03-3C(8)(b)

9. Statement of Necessity for Special Conditions 13(a), 13(b), 13(c), 13(d), 13(e): These conditions are necessary to ensure that water quality standards for the growth and propagation of fish, other aquatic life, and wildlife are met, and numeric criteria of water quality standards are met.

<u>Citations</u>: 26.08.02.03-3C(10); 26.08.02.03-3C-1(1); 26.08.02.03-3H

10. <u>Statement of Necessity for Special Conditions 14(a), 14(b), 14(c), 14(d), 14(e):</u> These conditions are necessary to address trash and debris accumulation in Conowingo Pond to meet water quality standards.

<u>Citations:</u> COMAR 26.08.02.03B(2)(a); 26.08.02.03B(2)(d); 26.08.02.03B(2)(e); 26,08.02.02B(1)(a); 26.08.02.02B(1)(b)

11. Statement of Necessity for Special Conditions 16(a), 16(b), 16(c), 16(d), 16(e), 16(f): These conditions are necessary to ensure use of any project lands and discharges from those uses will meet water quality standards for growth and propagation of fish, other aquatic life, and wildlife.

<u>Citations</u>: COMAR 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.03B(2)(d); 26.08.02.03B(2)(e)26,08.02.02B(1)(a); 26.08.02.02B(1)(b); 26.08.02.03-3A(5); 26.08.02.03-3B(1); 26.08.02.03-3C-1(1); 26.08.02.03-3C(5)

12. <u>Statement of Necessity for Special Condition 16(d)</u>: These conditions are necessary to ensure use of any project lands and discharges from those uses will meet water quality standards for growth and propagation of fish, other aquatic life, and wildlife.

<u>Citations:</u> COMAR 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.03B(2)(a); 26.08.02.03B(2)(d); 26.08.02.03B(2)(e); 26,08.02.02B(1)(a); 26.08.02.02B(1)(b); 26.08.02.03-3A(5); 26.08.02.03-3B(1); 26.08.02.03-3C-1(1); 26.08.02.03-3C(5)

13. Statements of Necessity for Special Conditions 2(h), 2(i), 2(j), 2(k), 2(l), 2(m), 2(n), 2(o), 2(p), 3(b), 3(c), 3(d), 4(c), 5(n), 6(a), 8(a), 8(b), 8(f), 8(g), 10(a), 10(b), 10(c), 10(h), 11(d), 14(b), 14(d), 14(e), 15(a), 15(b), 15(d), 16(b), 16(c), 16(e), 17(b), 18(b): These conditions are necessary to ensure that Project operations and discharges do not interfere

with water quality standards for growth and propagation of fish, other aquatic life, or wildlife.

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<u>Citations</u>: COMAR 26.08.02.03-3; 26.08.02.03B; 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.03; 26.08.02.03B(2)(a); 26.08.02.03B(2)(d); 26,08.02.02B(1)(a); 26.08.02.02B(1)(b); 26.08.02.03-3A(5); 26.08.02.03-3B(1); 26.08.02.03-3C-1(1); 26.08.02.03-3C(5)
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14. Statement of Necessity for Special Conditions 4(b), 4(c), 5(d), 5(f), 5(m), 5(j), 5(n), 5(k), 6(a), 8, 10(a), 10(b), 10(c), 11(c), 11(d), 13(a), 13(b), 14(a), 14(b), 15(a), 15(c), 16(a), 17(a), 17(b), 18(a), 18(b), 19(a), 19(b), 20(a), 20(b): MDE-approved management, monitoring, and equipment plans, implemented by the Certification Holder, ensure discharges comply with water quality standards for the growth and propagation of fish, other aquatic life, and wildlife.

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<u>Citations</u>: COMAR 26.08.02.02B(1)(d); 26.08.02.03B(2)(e); 26.08.02.02B(4)(a); 26.08.02.02B(2)(a); 26.08.02.03-3A(5); 26.08.02.03-3B(1); 26.08.02.03-3C-1(1); 26.08.02.03-3C(5); 26.08.02.03B(2)(a); 26.08.02.03B(2)(d); 26.08.02.03B(2)(e); 26,08.02.02B(1)(a); 26.08.02.02B(1)(b)
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15. Statement of Necessity for Special Condition 1, 5(h), 8(e), 10(l) and General Condition 21: These conditions are necessary to ensure review of required reports and data, which are used to evaluate compliance with the Certification and determine whether operations and discharges meet water quality standards. They address unique discharge circumstances and long-term retention of operational data to verify ongoing compliance with water quality standards.

<u>Citations</u>: Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; 26.17.04; COMAR 26.23; COMAR 26.23.02.06

ATTACHMENT B

FORM OF ACKNOWLEDGEMENT OF PAYMENT OPERATIVE DATE

ACKNOWLEDGEMENT

(the "Agreement"), dated, 202 Environment ("MDE"), Constellation Is company ("Constellation"), and Waterk ("Waterkeepers," and together with MI	n Conowingo Dam Water Quality Settlement Agreement 25, by and between State of Maryland, Department of the Energy Generation, LLC, a Pennsylvania limited liability seepers Chesapeake and Lower Susquehanna Riverkeeper DE and Constellation, the "Parties"). The Parties hereby nt Operative Date (as defined in the Agreement) occurred
IN WITNESS WHEREOF, the Payment Operative Date.	e Parties have executed this Acknowledgement as of the
	STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT
	By: Name: Title: Date:
	CONSTELLATION ENERGY GENERATION, LLC
	By: Name: Title:

WATERKEEPERS CHESAPEAKE

By: Name: Title: Date:	
	R SUSQUEHANNA RIVERKEEPER IATION
By: Name: Title: Date:	