



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Waterways and Wetlands Program
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110-8200**

**WATER QUALITY CERTIFICATION
CHRISTOPHER M. CRANE CLEAN ENERGY CENTER**

DEP File No. WQC2203225-001

**CONSTELLATION ENERGY GENERATION, LLC
Christopher M. Crane Clean Energy Center
2625 River Road
Middletown, PA 17057-0480**

**Londonderry Township, Dauphin County, Pennsylvania
U.S. Army Corps Of Engineers, Baltimore District**

**Water Quality Certification under Section 401 of the Federal Clean Water Act for the
Christopher M. Crane Clean Energy Center Restart**

The Christopher M. Crane Clean Energy Center (Crane Clean Energy Center) is an existing nuclear-fueled pressurized water reactor electric power generating facility located on Three Mile Island in the Susquehanna River in Londonderry Township, Dauphin County. The Crane Clean Energy Center is owned and operated by Constellation Energy Generation, LLC (Constellation). Constellation has submitted a License Amendment Request to the United States Nuclear Regulatory Commission for a proposed re-commissioning and restart of the facility.

Impacts to aquatic resources associated with resumed operation of the Facility include water withdrawal from the Susquehanna River, consumptive use, and the thermal impacts of the heated water discharges back to the Susquehanna River which has a designated use of WWF, MF. Water is proposed to be withdrawn at an amount up to 73.200 million gallons per day (MGD) (peak day) from the Susquehanna River, with a proposed consumptive use of up to 21.000MGD. Impingement and entrainment effects on the migratory and resident fish as well as other aquatic species are anticipated to be minimized through the facilities continued operation and use of closed cycle cooling technologies. Discharge temperatures will be a maximum 110°F. Additionally, operation, maintenance, repair, and replacement of existing water obstructions and encroachments, such as existing bridges at the site, will continue to occur as necessary.

The Commonwealth of Pennsylvania (Commonwealth) Department of Environmental Protection (PADEP) certifies that the restart, operation, and maintenance of the Facility complies with the applicable provisions of sections 301—303, 306, 307 and 316 of the Federal Clean Water Act (33 U.S.C.A. §§ 1311—1313, 1316 and 1317) and appropriate requirements of state law. PADEP further certifies that the restart, operation, and maintenance of the facility complies with Commonwealth applicable water quality standards and that the construction, operation, and maintenance of the Facility complies with Commonwealth water quality standards provided that the construction, operation, and maintenance of the facility complies with the conditions identified in this certification, including the criteria and conditions of the following:

1. Discharge Permit - Constellation shall obtain and comply with a PADEP National Pollutant Discharge Elimination System (NPDES) permit for the discharge of pollutants pursuant to Pennsylvania's Clean Streams Law (35 P.S. §§ 691.1 – 691.1001) and all applicable implementing regulations (25 Pa. Code Chapters 91, 92a, 93, 96).
2. Erosion and Sediment Control Permitting - Constellation shall obtain an NPDES permit for the stormwater associated with construction activities and any other authorization required under 25 Pa. Code Chapter 102 pursuant to Pennsylvania's Clean Streams Law and Storm Water Management Act (32 P.S. §§ 680.1-680.17) and all applicable implementing regulations (25 Pa. Code Chapters 92a and 102) for any earth disturbance activities that require said permit.
3. Erosion and Sediment Control Plan – Constellation shall develop an Erosion and Sediment Control Plan that is consistent with the requirements identified in 25 Pa.

August 14, 2026

Code Chapter 102 for any proposed earth disturbance activities at the site which do not require a permit under Condition 2, above. Constellation shall obtain approval of the E&S Control Plan (s) for the project from the Dauphin County Conservation District or the PADEP prior to the commencement of earth disturbance activities for the project. Constellation shall implement the approved Erosion and Sediment Control Plan(s) and the best management practices (BMP's) to minimize the potential for accelerated erosion and sedimentation from the project and to protect, maintain, reclaim and restore water quality and the existing and designated uses of waters of the Commonwealth and comply with all applicable implementing regulations (25 Pa. Code Chapter 102) pursuant to Pennsylvania's Clean Streams Law.

4. Water Obstruction and Encroachment Permits - Constellation shall obtain and comply with a PADEP Chapter 105 Water Obstruction and Encroachment Permit or Dam Permit for the construction, operation and maintenance of all dams, water obstructions or encroachments associated with the project pursuant to Pennsylvania's Clean Streams Law, Dam Safety and Encroachments Act (32 P.S. § § 673.1-693.27), and Flood Plain Management Act (32 P.S. §§ 679.101-679.601.) and all applicable implementing regulations (25 Pa. Code Chapters 93, 96, 105, and 106). Constellation shall implement the project in accordance with the information, plans, and specifications included within water obstruction and encroachment permits and all applicable implementing regulations. (25 Pa. Code Chapters 93, 96, 102, 105, and 106)
 - a. Within 12 months after issuance of this Certification, Constellation shall obtain Chapter 105 authorization(s) for operation and maintenance of existing water obstructions or encroachments at the site which do not have an existing water obstruction or encroachment permit.
 - b. Constellation shall complete a wetland delineation for the entire project site by September 30, 2026.
5. Aquatic Life Monitoring - Within 180 days after issuance of this Certification, Constellation shall submit a plan for review and approval by PADEP to conduct intake strainer/bar screen surveys to characterize the number and species diversity of any fish captured on the intake screens. Constellation shall implement the plan as approved by PADEP.
6. Susquehanna River Basin Commission - Constellation shall mitigate consumptive use as approved and conditioned by the Susquehanna River Basin Commission including any future amendments to that plan.
7. Water Quality Monitoring - PADEP retains the right to specify additional studies or monitoring to ensure that the receiving water quality is not adversely impacted

August 14, 2026

and to demonstrate compliance with applicable Water Quality Standards by any operational and construction process that may be employed by Constellation.

8. Operation - For the restart under this Certification, Constellation shall at all times properly operate and maintain the Constellation facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this Certification and all required permits. Proper operation and maintenance include adequate laboratory controls, appropriate quality assurance procedures, and the operation of backup or auxiliary facilities or similar systems installed by Constellation.
9. Inspection - The Crane Clean Energy Center, including all relevant records, are subject to inspection at reasonable hours and intervals by an authorized representative of PADEP to determine compliance with this Certification, including all required state water quality permits, conditions of this certification, appropriate requirements of state law and Pennsylvania's Water Quality Standards. A copy of this Certification shall be available for inspection by the PADEP, or an authorized representative thereof, during such inspections of the Crane Clean Energy Center facility.
10. Transfer of Projects - If Constellation intends to transfer any legal or equitable interest in the Crane Clean Energy Center, they shall serve a copy of this Certification upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the PADEP Regional Office of such intent. Notice to PADEP shall include a transfer agreement signed by the existing and new owner containing a specific date for transfer of Certification responsibility, permits, coverage, and liability between them.
11. Correspondence - All correspondence with and submittals to PADEP concerning this Certification shall be addressed to:

Department of Environmental Protection
Southcentral Regional Office
Waterways and Wetlands Program Manager
909 Elmerton Avenue
Harrisburg, PA 17110-8200
12. Reservation of Rights - PADEP may suspend or revoke this Certification if it determines that Constellation has not complied with the terms and conditions of this Certification. PADEP may require additional measures to achieve compliance with applicable law, subject to Constellation's applicable procedural and substantive rights.
13. Other Laws - Nothing in this Certification shall be construed to preclude the institution of any legal action or relieve Constellation from any responsibilities,

August 14, 2026

liabilities, or penalties established pursuant to any applicable federal or state law or regulation.

14. Severability - The provisions of this Certification are severable and should any provision of this Certification be declared invalid or unenforceable, the remainder of the Certification shall not be affected thereby.
15. Time Period - This Certification shall remain in effect during the term established by the NRC in the License Amendment for the restart of the facility as Crane Clean Energy Center, and as long as Constellation remains in compliance with this Certification and all applicable state water quality permits, and as long as Constellation operates the facility at its current energy generation rating, and does not significantly modify operations that may change the nature or characteristics of discharges from the facility or otherwise impact water quality standards from the facility's operation, and as long as PADEP has not exercised its rights of Paragraph 12. of this Certification herein

In the event Constellation seeks renewal of their NRC license related to operation of the facility, seeks an energy generation uprate from the NRC that requires NRC action, proposes facility modifications associated with an NRC licensing action that may change the nature, character, volume, timing, location, or other characteristics of a discharge from the facility and/or otherwise impacts water quality standards from the facility's operation, or seeks to re-commission and restart energy generation after having terminated operation as an energy generation facility, Constellation shall request a new water quality certification from PADEP.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

August 14, 2026

Scott R. Williamson

Date

Program Manager

Waterways and Wetlands Program