

**DOCKET NO. D-2014-002 CP-1**

**DELAWARE RIVER BASIN COMMISSION**

**Located in the Drainage Area of Special Protection Waters**

**New York City Department of Environmental Protection  
Cannonsville Hydroelectric Project  
Delaware County, New York**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Couch White, LLP on behalf of the New York City Department of Environmental Protection (NYCDEP or docket holder) on December 11, 2013 (Application), for review of the docket holder's proposed Cannonsville Hydroelectric Project (the Project). The New York State Department of Environmental Conservation (NYSDEC) issued Water Quality Certification (WQC) No. 4-1230-00089/00010 for the project on June 10, 2013, effective June 11, 2013, and modified June 18, 2013. The Federal Energy Regulatory Commission (FERC) issued a final Environmental Assessment (EA) and Order Issuing Original License for the project (Project No. 13287-00413) on January 28, 2014 and May 15, 2014, respectively. The United States Army Corp of Engineers (USACE) is expected to issue a Section 404 Permit for this project following final FERC licensing.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Delaware County Planning Department has been notified of pending action. A public hearing on this project was held by the DRBC on June 10, 2014.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to approve the construction and operation of the Project, which includes a powerhouse with four hydroelectric turbines with a total output of up to 14.08 megawatts (MWs) and appurtenances, which will be located adjacent to the existing release works at the Cannonsville Dam. The turbines are designed to utilize flow releases of up to 1,500 cubic feet per second (cfs) from the dam's controlled release works to generate electricity for on-site purposes and for sale to the wholesale market.

2. **Location.** The Cannonsville Dam is located at River Mile 330.71 – 17.9 (Delaware River – West Branch Delaware River), within the drainage area to the Upper Delaware Special Protection Waters (SPW), outside the Town of Deposit, Delaware County, New York. Specific location information has been withheld for security reasons.

3. **Area Served.** Energy produced by the Project will supply the power for certain on-site operations, but the bulk of the power will be sold into the wholesale markets or disbursed through a power purchase agreement. The Cannonsville Reservoir provides storage for public water supply, recreational use and water storage to supplement stream flow in the main-stem Delaware River. The yield from the Cannonsville reservoir is used for supplying water to the City of New York (NYC), and communities located along the water tunnel that conveys water to NYC, as well as for conservation releases to the West Branch, Delaware River. For the purpose of defining the Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Reservoir and Dam Description.** The Cannonsville Reservoir is one of the three NYC owned and operated water supply reservoirs in the Delaware River Basin that supply water to the NYC. It is located on the West Branch of the Delaware River in Delaware County, New York, about four miles upstream of the Village of Deposit. It was placed in operation in 1964. Cannonsville Dam has a zoned earthen embankment configuration and is approximately 175 feet high (above the original river channel and is approximately 2,800 feet long, (at the top). At its northerly contact with the valley wall there is an un-gated spillway. Spillage is directed into a channel, through a stilling basin and into an outlet channel that guides the flow into the West Branch of the Delaware River. Cannonsville Reservoir is 1,175 feet above mean sea level, with a capacity above sill elevation (1,150 feet) of approximately 296,853 acre-feet or 96.7 billion gallons of water. The reservoir is approximately 12 miles long and 4,700 feet wide at its maximum and impounds approximately 4,800 acres.

b. **The Project.** The docket holder proposes to construct a powerhouse approximately 168 feet long and 54 feet wide adjacent to the existing low-level release works building of the Cannonsville Dam. The powerhouse will contain four horizontal-shaft, Francis-type turbine-generator units with a total hydraulic capacity of up to 1,500 cubic feet per second (cfs). Two turbines would have a maximum hydraulic capacity of approximately 625 cfs and the other two turbines would have a hydraulic capacity of approximately 125 cfs to allow for operational flexibility. The larger units have a rated capacity of 5.855 MW and the smaller units have a rated capacity of 1.185 MW, for a total station capacity of up to 14.08 MW. The powerhouse will use the conservation releases and the controlled water releases made to the West Branch Delaware River in a manner that is consistent with the 1954 Amended Decree of the U.S. Supreme Court in New Jersey v. New York, 347 U.S. 995 (Decree) and the reservoir operating program legally in effect at the time of Project operation. In accordance with Section 3.3(a) of the Delaware River Basin Compact (Compact), the Commission may approve actions

affecting terms of the Decree only with the unanimous consent of the Decree Parties – the State of Delaware, the State of New Jersey, the State of New York, the Commonwealth of Pennsylvania, and the City of New York . The powerhouse does not receive reservoir water that is directed by NYC out of the Delaware River Basin for water supply purposes under the Decree.

c. **Cost.** The overall cost of the Project is estimated to be \$72,035,000 (See DECISION Condition II.h.).

d. **Relationship to the Comprehensive Plan.** The Cannonsville reservoir was included in the Comprehensive Plan by Resolution No. 62-4, approved on March 28, 1962, five years prior to when operation of the system commenced and eight years after the Decree was signed warranting its need to provide water to NYC. This docket approves the inclusion of the Project in the Comprehensive Plan. (See DECISION Condition I.)

## **B. FINDINGS**

The purpose of this docket is to approve construction and operation of four hydroelectric turbines with a total output of up to 14.08 MWs that will be located adjacent to the existing release works at the Cannonsville Dam. The turbines are designed to utilize flow releases of up to 1,500 cfs from the dam to generate electricity for on-site purposes and for sale to the wholesale market.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *WQR* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program.

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The service area of the docket holder is located within in the drainage area to the SPW. Since this project entails construction, there are potentially new or increased non-point source loads associated with the project and so

the NPSPCP requirement is applicable at this time. Accordingly, DECISION Condition II.1. is included in this docket.

The powerhouse will use the conservation releases and the controlled water releases made to the West Branch Delaware River in a manner that is consistent with the 1954 Amended Decree of the U.S. Supreme Court in New Jersey v. New York, 347 U.S. 995 (Decree) and the reservoir operating program legally in effect at the time of Project operation. In accordance with Section 3.3(a) of the Delaware River Basin Compact (Compact), the Commission may approve actions affecting terms of the Decree only with the unanimous consent of the Decree Parties – the State of Delaware, the State of New Jersey, the State of New York, the Commonwealth of Pennsylvania, and the City of New York.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Commission's *WQR*.

### C. DECISION

I. Effective on the approval date for Docket No. D-2014-002 CP-1 below, the Project described in Section A.4.b. of this docket shall be added to the Comprehensive Plan.

II. The construction and operation of four hydroelectric turbines with a total output of up to 14.08 MWs and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NYSDEC, FERC, and USACE, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's

b. The docketed site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Commission to determine whether the docket holder is complying with this docket. The docket holder shall allow said representative, showing proper credentials access to, through and across project lands and project works in the performance of their official duties. The docket holder shall provide a person to accompany the Commission's representative during an inspection. The Commission agrees to comply with all appropriate and applicable health and safety requirements during such inspection."

c. The Project shall be operated at all times to comply with the requirements of the Commission's *WQR* and *Water Code*.

d. The Project shall only utilize releases from the Cannonsville Dam's controlled release works to the West Branch Delaware River that are made in accordance with the 1954 Amended Decree of the U.S. Supreme Court in *New Jersey v. New York*, 347 U.S. 995, and the operating program legally in effect at the time of Project operation.

e. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

f. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams.

g. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

h. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement ("Statement") signed by the docket holder's professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (2) report the project's final construction cost as such cost is defined by the project review fee schedule in effect at the time the application was made; and (3) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the docket holder to calculate the DRBC project review fee, the statement must also include (4) the amount of any outstanding balance owed for DRBC review. The outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project's final cost, using the formula and definition of "project cost" set forth in the DRBC's project review fee schedule in effect at the time application was made.

i. The new Powerhouse and related piping, roadway, and transmission lines shall be completed within five years of approval of this docket or the docket holder shall demonstrate to the Executive Director that it has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval. If this scope of work has not been completed within five years of Docket Approval and the docket holder does not submit a cost analysis demonstrating substantial funds have been expended, Commission approval of the new Powerhouse project shall expire. If this occurs, the docket holder shall file a new application with the Commission and receive Commission approval prior to initiating construction of the new Cannonsville Powerhouse project.

j. The docket holder shall discharge water from the turbines/generators in a manner consistent with its Water Quality Certificate issued under section 401(a)(1) of the Clean Water Act (CWA) to minimize injury or damage to fish or wildlife and shall minimize any injury to public or private property.

k. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend,

suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

l. The docket holder's NPSPCP meets the general requirements of Article 3.10.3.A.2.e.1) of the Commission's *WQR*.

m. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

n. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

o. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

**BY THE COMMISSION**

**DATE APPROVED: June 11, 2014**

**EXPIRATION DATE: June 10, 2044**