DOCKET NO. D-1999-061-2

DELAWARE RIVER BASIN COMMISSION

Liberty Electric Power, LLC
Electric Generating Facility Consumptive Use
Eddystone Borough, Delaware County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on March 25, 2024 for renewal of an electric generation facility and its associated consumptive use (Application).

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Delaware County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 7, 2025.

A. <u>DESCRIPTION</u>

- 1. <u>Purpose.</u> The purpose of this docket is to renew the approval of the docket holder's existing 600-megawatt natural gas fired electric generation facility and consumptive use of up to 4.7 million gallons per day (mgd) of treated surface water provided by Aqua Pennsylvania's (Aqua PA) interconnection with the Philadelphia Water Department (PWD).
- **Location.** The electric generation facility is located on a 25.5-acre parcel located between State Route 291 and the Amtrack/SEPTA rail lines in Eddystone Borough, Delaware County, Pennsylvania.
- 3. Area Served. The consumptive use of water detailed in this docket will be utilized by the docket holder's energy facility. Water for the facility will continue to be provided by Aqua PA from an interconnection with the PWD. Wastewater from the facility will continue to be conveyed to the Delaware County Regional Waer Quality Control Authority (DELCORA) Western Regional Wastewater Treatment Plant. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in Section C. DECISION of this docket.
- **4. Design Criteria.** The Liberty Electric Power Plant is a 600 MW combined-cycle, natural gas fired electric generating station that supplies electricity to the Pennsylvania Jersey Maryland (PJM) grid. The facility operates year-round on a continuous basis, although actual

utilization depends on business factors, such as the regional electricity demand and price. The facility began operating in 2001.

Water required for the operation of the facility is provided by Aqua PA. The docket holder reports an average daily demand of approximately 2.5 mgd and a peak monthly demand of 118.33 million gallons is required for industrial cooling and processes. Based on operation records, an average of approximately 88 percent (approximately 2.2 mgd) of the total water use is consumptive. The consumptive use allocation provided by this docket is based on the peak design daily water demand of 6 mgd and the resulting peak daily consumptive use of 4.7 mgd. After use, approximately 0.3 mgd on average and 1.3 mgd on peak of process and sanitary wastewater is conveyed to the DELCORA STP for treatment.

- **Facilities.** The proposed facility consists of two General Electric Frame 7FA combination turbines/generators, two heat recovery steam generators, one steam turbine/generator and a 12-cell mechanical draft evaporative cooling tower and associated equipment. The demineralization plant (for generator makeup water) consists of a reverse osmosis filtration system, two polishing pods and a demineralized water storage tank.
- **Other.** The potable water supply in the project service area is provided by Aqua PA. Aqua PA obtains its water supply via bulk purchase from the City of Philadelphia as described in DRBC Docket No. D-99-69 CP approved on January 26, 2000.

Wastewater is conveyed to the DELCORA WWTP, which was approved most recently by DRBC Docket No. D-1992-018 CP-4 on March 13, 2019. The WWTP discharges to the Delaware River and has adequate capacity to continue to receive flows from this existing project.

B. FINDINGS

1. <u>Consumptive Use</u>

The electric generating facility will continue to consumptively use up to 4.7 mgd of water provided by Aqua PA. Average consumptive use is 2.2 mgd.

Water provided by Aqua PA and the volume of wastewater conveyed to DELCORA are metered. Consumptive use is determined by metering.

2. <u>Consumptive Use Replacement Provision</u>

Resolution No. 2018-5 requires that certain electric generating or cogenerating facilities develop or acquire sources of replacement water for use during critical hydrologic conditions as a condition of approval. The Project is subject to the consumptive use requirement as it a generating facility designed to consumptively use in excess of 100,000 gallons per day (gpd) of water during any 30-day period and the primary source of water is surface water located upstream of River Mile 38. The following provision from Resolution No. 2018-5 is included as Condition C.6. in Section C. DECISION:

"For the duration of a critical hydrologic condition as announced by the Commission, on a daily basis the docket holder shall cause to be released from a replacement water source approved by the Commission an amount of water equal to the amount consumptively used by the docketed facility, multiplied by the applicable relative effect factor, if assigned. For the duration of such critical hydrologic condition, the docket holder shall operate its facility only at a level commensurate with the amount of replacement water it is capable of causing to be released."

The docket holder utilizes Merrill Creek as its replacement source. As described in a letter dated April 22, 2002, the docket holder executed a subcontract agreement with Delmarva Power and Light Company for storage at the Merrill Creek Reservoir. As approved by the DRBC, the Merrill Creek Reservoir, located on Merrill Creek in Harmony Township, Warren County, New Jersey, provides supplemental storage from which releases are made during drought conditions to compensate for freshwater equivalent consumptive use of designated steam electric and combined cycle generating units owned by members of the Delaware River Basin Electric Utilities Group. Liberty Electric is included in Attachment 2, Exhibit III, as a "Designated Unit" in DRBC Docket No. D-1977-110 CP-19, approved on September 13, 2018. The consumptive use stored for release by Merrill Creek for the electric generation station is 4.49 cfs (2.9 mgd). The agreement is for the period through February 29, 2032 per the Merrill Creek Agreement Article IV, Section 4.1 Base Term.

Prior to any change to the approved replacement source described above, the docket holder must submit a Consumptive Use Replacement Plan in accordance with Resolution No. 2018-5 to the Commission and receive written approval from the DRBC Executive Director. See Section C. DECISION condition C.7.

3. Surface Water Charges

The docket holder shall continue to pay for surface water use in accordance with Basin Regulations-Water Supply Charges 18 C.F.R. Part 420. See Section C. DECISION condition C.2.

4. Other Findings

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.

C. <u>DECISION</u>

Effective on the approval date for Docket No. D-1999-061-2 below, Docket No. D-99-61-1 is terminated and replaced by Docket No. D-1999-061-2. The project and appurtenant facilities as described in in Section A.4. (Design Criteria) and A.5. (Facilities) are approved subject to the following conditions, pursuant to Section 3.8 of the *Compact*:

Monitoring and Reporting

- 1. The quantity of water used shall be determined by meters, or other methods approved by the Commission, installed, maintained and read by or on behalf of the docket holder. Meters or other methods of measurement shall be subject to approval and inspection by the Commission as to installation, maintenance and reading.
- 2. The docket holder shall pay for surface water use in accordance with *Basin Regulations Water Supply Charges 18 C.F.R. Part 420*.

Other Conditions

- 3. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.
- 4. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 C.F.R. 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the event of untimely submittal of its renewal application whether DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If the docket holder has not applied to renew the docket or the DRBC is unable to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable pending the renewal of the docket.
- 5. During any month, consumptive water usage shall not exceed 145.7 million gallons (4.7 mgd) for use at the electric generating facility
- 6. For the duration of a critical hydrologic condition as announced by the Commission, on a daily basis the docket holder shall cause to be released from a replacement water source approved by the Commission an amount of water equal to the amount consumptively used by the facility, multiplied by the applicable relative effect factor, if assigned. For the duration of such critical hydrologic condition, the docket holder shall operate its facility only at a level commensurate with the amount of replacement water it is capable of causing to be released.
- 7. Prior to any change of the approved replacement source or consumptive use allocation described in this docket, the docket holder shall submit a Consumptive Use Replacement Plan in accordance with Resolution No. 2018-5 to the Commission and receive written approval from the DRBC Executive Director.

- **8.** The facility and operational records shall be available at all times for inspection by the DRBC.
- **9.** The facility shall be operated at all times to comply with the requirements of the *WC* and *WQR* of the DRBC.
- 10. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).
- 11. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.
- 12. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.
- 13. 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.
- **14.** The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.
- 15. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).
- 16. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).
- 17. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 C.F.R. 401.43).
- 18. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder to ensure the proper control, use and management of the water resources of the Basin.
- 19. 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.

- **20.** For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.
- 21. 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

APPROVAL DATE: June 11, 2025

EXPIRATION DATE: June 11, 2035