

10/20/2026

DOCKET NO. D-2000-014-2

DELAWARE RIVER BASIN COMMISSION

**Ontelaunee Power Operating Company
Electric Generating Facility Consumptive Use and Discharge
Ontelaunee Township, Berks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on January 31, 2025, for renewal of an electric generation facility project and its associated consumptive use and discharge. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0088323 for this discharge. The project was previously approved by the Commission via Docket D-2000-14 on September 28, 2000.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Berks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on February 4, 2026.

A. DESCRIPTION

1. **Purpose.** The purpose of this docket is to renew the approval of the docket holder's existing 580-megawatt natural gas fired electric generation facility, the consumptive use of up to 4.0 mgd of water provided by the Reading Area Water Authority (RAWA) and the discharge of 0.4 mgd of cooling tower blowdown.
2. **Location.** The electric generating facility is located on a 19-acre site between State Route 61 and the Conrail railroad tracks in Ontelaunee Township Berks County, Pennsylvania. Water supply is purchased from the Reading Area Water Authority's sources located in Lake Ontelaunee and Maiden Creek in Maiden Creek Township, Berks County Pennsylvania. Cooling Tower blowdown water will continue to be discharged to Schuylkill River, at River Mile 92.5 – 86.1 (Delaware River – Schuylkill River).

The location of the outfall in the Schuylkill River Watershed is as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 24' 58"	75° 56' 30"

3. **Area Served.** The consumptive use of water and wastewater discharge described in this docket serves the docket holder's electric generation facility only. Water for the facility will continue to be provided by RAWA.

4. **Design Criteria.** The existing power plant is a nominal 580 MW natural gas-fired, combined cycle electric generating station. The electric power generated is transmitted to the GPU North Temple substation located approximately one mile from the facility and provided to the Pennsylvania-Jersey-Maryland power grid for purchase.

Water required for the operation of the facility is provided by the Reading Area Water Authority. Most of the water (approximately 97 percent) is used for cooling tower makeup. The remainder is for plant service water. The amount of cooling water makeup depends on load, climatic conditions, number of cycles and other operating conditions. The maximum daily design water demand for cooling and plant service use is 3.92 million gallons per day. Based on water usage data submitted to PADEP, the average monthly water use at the facility is approximately 73 million gallons per month.

On average, approximately 90 percent of the project water supply is depleted through cooling tower evaporation and drift. Following up to 10 cycles of recirculation and reuse, up to approximately 0.4 mgd of cooling tower blowdown and plant service water is discharged to the Schuylkill River. Plant floor drainage, miscellaneous plant wastewater, and reverse osmosis (RO) reject water and RO membrane cleaning water, and backwash from the on-site demineralization process is conveyed through an oil/water separator and then to the cooling tower. The cooling tower blowdown discharges via Outfall No. 001 to the Schuylkill River. Cooling tower blowdown is treated with a dechlorination system prior to discharge. The PADEP issued NPDES Permit No. PA0088323 for this discharge.

5. **Facilities.** The power production facilities consist of two combined-cycle combustion turbines, two heat recovery steam generators, one steam turbine, a demineralization facility, a blowdown storage tank, a small-capacity oil/water separator and a 12-cell mechanical draft, counter-flow, wet cooling tower used to cool the main facility condenser water and minimize thermal loading on the Schuylkill River.

Water supplied by RAWA is metered.

The project is located above the 100-year flood elevation.

6. **Other.** Potable water is supplied by RAWA. Sanitary wastewater is collected by the Ontelaunee Township Municipal Authority sewer system and conveyed to the Leesport Borough Authority WWTP for treatment. Combustion Turbine wash water is hauled off-site for treatment at an approved facility in accordance with the PADEP NPDES Permit.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0088323 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting warm water fishes (WWF). EFFLUENT TABLE C-1 included in Section C. DECISION condition C.1. of this docket, contains effluent requirements for DRBC parameters that must be met as a condition of this approval. Effluent requirements for Outfall No. 001 are based on a discharge rate of 0.4 mgd.

8. **Docket Relationship to the Comprehensive Plan**

The RAWA water supply facilities and Ontelaunee Reservoir were included in the Comprehensive Plan by Addendum No. 1, Section VIII; Pre-Existing Projects adopted July 25, 1962. Docket No. D-67-237 CP adopted on May 22, 1968, approved RAWA's filtration plant expansion to 40 mgd. Docket No. D-69-139 CP, adopted on August 27, 1969, approved a 35-mgd diversion from Ontelaunee Reservoir. The RAWA Lake Ontelaunee and Maiden Creek withdrawals are continued in DRBC Docket D-2000-059 CP-3 approved on March 10, 2021. The project outfall discharges to the Schuylkill River in an area designated as "Modified Recreational", which was included in the Comprehensive Plan by Docket No. D-78-50 CP on July 26, 1978.

B. FINDINGS

The docket holder applied for the renewal of an existing electric generating facility including a consumptive water use of greater than 100,000 gallons per day. The project consists of a nominal 580 MW electric generating facility with a consumptive use of up to 4 mgd of water provided by the Reading Area Water Authority and discharge of 0.4 mgd.

1. **Water Supply**

The project does not involve a self-supplied surface or groundwater withdrawal. Water for power plant operations and potable uses is provided by RAWA. RAWA owns existing surface water intakes on the Lake Ontelaunee Reservoir and downstream of the reservoir on Maiden Creek, from which it provides public water supply to residential, commercial, and industrial users in the City of Reading and surrounding areas. RAWA's surface water withdrawal is described in detail in DRBC Docket No. D-2000-059 CP-3, approved by the DRBC on March 10, 2021. The docket includes a combined surface water withdrawal allocation of 35 mgd (1,085 million gallons per month) from the intakes.

Lake Ontelaunee is subject to conservation release requirements. PADEP Water Allocation Permit No. WA 06-127B requires a continuous flow of not less than 30.0 mgd (46.55 cfs) be maintained in Maiden Creek immediately below the Lake Ontelaunee intake. RAWA's Maiden Creek intake withdrawal is also subject to passby flow requirements. PADEP Water Allocation Permit No. WA 06-127B requires a flow of not less than 32.1 mgd (49.66 cfs) be allowed to pass the intake at all times. When the stream flow below the Lake Ontelaunee Reservoir is less than this amount, the withdrawal shall be reduced to maintain 32.1 mgd in the stream channel below the intake. When the natural flow is equal to or less than 32.1 mgd, no water may be withdrawn and the entire natural flow shall be allowed to pass the Maiden Creek intake, to maintain such natural flow in the stream channel below the intake as may prevail above.

2. Water Supply Charges

Since the docket holder's consumptive use water allocation does not include a surface water withdrawal, the docket holder is not subject to water supply charges. With regard to the water provided for the project by RAWA from its surface water sources, the City of Reading constructed and maintained the Lake Ontelaunee Reservoir prior to the establishment of the DRBC. RAWA is a municipal authority that is successor in interest to the City of Reading, as owner and operator of the Lake Ontelaunee Reservoir. Section 5.1.3 D, of the DRBC Basin Regulations – Water Supply Charges (18 CFR 420.23(d) provides: “Notwithstanding the provisions of A., B. and C., there shall be no charge for water made available from storage where: (1) The cost of the storage facility has or will be otherwise paid for by the user; (2) such storage controls a drainage area; and (3) The use does not exceed the yield of such storage without augmentation from other surface water of the basin.”

RAWA meets the conditions of section 5.1.3 D. and therefore is not required to pay water supply charges to the Commission for withdrawals from the Lake Ontelaunee Reservoir as: 1) the City of Reading and the successor agency, RAWA, has paid for and maintains the Lake Ontelaunee Reservoir storage facility; 2) the Lake Ontelaunee Reservoir storage facility controls a drainage area; and 3) RAWA's use does not exceed the yield of the Lake Ontelaunee Reservoir storage facility without augmentation from other surface water of the basin.

3. Consumptive Use

Resolution No. 2018-5 requires electric generating or cogenerating facilities that consumptively use greater than 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, to develop or acquire sources of replacement water for use during critical hydrologic conditions as a condition of approval. The docket holder is not required to make up consumptive use for this project because it obtains its water from storage available in the Lake Ontelaunee Reservoir and the reservoir is always subject to conservation release requirements, including during critical hydrologic conditions.

The electric generating facility will continue to consumptively use up to 4 mgd of water provided by RAWA. RAWA is required to meet minimum conservation releases and passby flows as required by DRBC Docket D-2000-059 CP-3 and PADEP Water Allocation Permit No. WA 06-127B. The docket holder is exempt from the Consumptive Use Replacement requirement unless conservation releases cease to be made from Lake Ontelaunee Reservoir. Operations at the electric generation facility will cease if water is unavailable for purchase from RAWA as currently the facility has secured no other source of water.

4. Total Dissolved Solids (TDS) Determination

Docket D-2000-14 approved a Total Dissolved Solids (TDS) limit of 1,500 mg/l. On November 29, 2001, the DRBC Executive Director approved an increase in the monthly average TDS effluent limit from 1,500 mg/l to 2,400 mg/l because TDS concentrations in the influent source were greater than originally calculated. The DRBC determined that the effluent TDS concentration would not cause an exceedance of DRBC stream quality objectives. The determination was based on an effluent flow of 0.35 mgd.

DRBC staff reevaluated the TDS to confirm that DRBC stream quality objectives would continue to be met at the design flow of 0.4 mgd included in the PADEP NPDES permit. DRBC staff determined the discharge continues to be in conformance with DRBC WQR since the in-stream concentrations in the Schuylkill River are not expected to exceed the US EPA's Safe Drinking Water Act's secondary standard for TDS (500 mg/l) nor exceed the Commission's criteria of 133% of background because of the proposed discharge. Therefore, approval of the TDS determination consisting of TDS effluent limits of 2,400 mg/l (average monthly) for the discharge from Outfall 001 is continued via this docket.

5. Other Findings

Mathematical modeling studies for effluent pollutants demonstrate that temperature and total dissolved solids in the effluent should not cause substantial impact to the water resources. Wastewater heat will be dissipated within a 200-foot long by 60-foot-wide area. PADEP's NPDES Permit includes a daily maximum temperature limit of 110 degrees F.

On February 25, 2021, the docket holder applied to the Commission for approval of a proposed groundwater withdrawal that was intended to be used to offset a portion of the water supplied by RAWA (Application No. D-2021-003-1). DRBC staff have outstanding questions related to the pumping test data and report that was submitted with the application. On January 19, 2022, DRBC staff informed the docket holder that further review of the project would not be conducted until a fully corrected and reevaluated dataset and accompanying pumping test report was submitted. Although a partial submission was submitted on February 22, 2022, DRBC staff still have outstanding questions and reporting needs. No additional review has been conducted since that time. In accordance with Section § 401.41(c) of the Commission's Rules of Practice and Procedure, any application that remains dormant (no proof of active pursuit of approvals) for a period of three years from date of receipt, shall be automatically terminated without further action of the Commission. Any renewed activity following that date will require submission of a new application.

At the docket holder's NCCW discharge location, the Schuylkill River has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 94.3 mgd (146 cfs). The low flow statistic was calculated using USGS Streamstats. The ratio of this low flow to the hydraulic design wastewater discharge rate (0.4 mgd) is 236 to 1.

The nearest surface water intake of record for public water supply is located on the Schuylkill River approximately 29 River Miles downstream of the docket holder's discharge and is operated by Borough of Pottstown.

The project as approved herein does not impair or conflict with the Comprehensive Plan.

The project is designed to conform to the requirements of the *Water Code (WC)* and *Water Quality Regulations (WQR)* of the DRBC.

The effluent limits in the NPDES Permit meet or exceed Commission effluent quality requirements where applicable.

The project is designed to produce a discharge that meets the effluent requirements as set forth in the Commission's *Water Quality Regulations (WQR)*.

C. DECISION

Effective on the approval date for Docket No. D-2000-014-2 below, Docket No. D-2000-14 is terminated and replaced by Docket No. D-2000-014-2. The project and appurtenant facilities as described 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 docket holder shall maintain records of its daily water use and corresponding consumptive use and report this data annually to the Commission by January 31.
2. Operations at the electric generating facility shall cease if water is unavailable for purchase from RAWA.
3. The docket holder shall comply with the requirements contained in the EFFLUENT TABLES below. The docket holder shall submit the required monitoring results electronically to the DRBC Project Review Section via email aemr@drbc.gov on the **Annual Effluent Monitoring Report Form** located at this web address: <https://www.nj.gov/drbc/programs/project/docket-app-info.html#3>. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations. The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE C-1: DRBC Parameters Included in NPDES Permit

OUTFALL 001 (Cooling Tower Blowdown)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l (average monthly)	As required by NPDES Permit
Total Dissolved Solids*	2,400 mg/l (average monthly) 3,000 mg/l (daily maximum) 3,000 mg/l (instantaneous maximum)	As required by NPDES Permit

OUTFALL 001 (Cooling Tower Blowdown)		
PARAMETER	LIMIT	MONITORING
Temperature**	110 ° F (Max)	As required by NPDES Permit

* See DECISION Condition C.11.

** See DECISION Condition C.5.

4. The docket holder shall continue to report to the PADEP the water use described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

Other Conditions

5. Consumptive use shall not exceed 4.0 mgd for use at the electric generating facility.

6. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F, nor shall such discharge result in stream temperatures exceeding 87°F, except within an assigned heat dissipation area consisting of 200 feet downstream and 60 feet wide.

7. 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.

8. 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.

9. The facility and operational records shall be available at all times for inspection by the DRBC.

10. The facility shall be operated at all times to comply with the requirements of the *WC* and *WQR* of the DRBC.

11. The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

12. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the

docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

13. The docket holder may request permission from the Executive Director to perform specific conductance monitoring in lieu of TDS monitoring. The request shall be made in writing and shall include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow specific conductance monitoring in lieu of TDS monitoring.

14. 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).

15. 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.

16. 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.

17. 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*.

18. The docket holder is permitted to treat and discharge wastewater as set forth in the Area Served Section of this docket, which incorporates by reference the Type of Discharge and Service Area sections of the docket holder's Application to the extent consistent with all other conditions of this section. Any expansion beyond that included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

19. 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).

20. 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).

21. 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).

22. 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.

23. 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.

24. 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.

25. 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:

EXPIRATION DATE: December 3, 2036