

DOCKET NO. D-1987-066-7

DELAWARE RIVER BASIN COMMISSION

Special Protection Waters

**Panther Creek Power Operating, LLC
Panther Creek Energy Facility
Groundwater Withdrawal and Subsidiary Water Allocation
Nesquehoning Borough, Carbon County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on March 18, 2022 for renewal of an allocation of groundwater and a subsidiary water allocation provided by Nesquehoning Borough Authority (NBA) to the Panther Creek Energy Facility (Application).

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Carbon County Office of Planning and Development has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on February 8, 2023.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of an allocation of 69.2 million gallons per month of groundwater (mine drainage water) from the Lausanne Tunnel and a subsidiary water allocation of 1.2 mgd based on a 30-day average provided by NBA from its Fourth Hollow Reservoir. Water is used for industrial processes and cooling purposes at the docket holder's electric generating facility.

2. Location. The energy facility and water withdrawal are located in Nesquehoning Borough, Carbon County, Pennsylvania. Water is pumped from the Lausanne Tunnel which drains mine pool overflow from the Lansford Mine pool to the Nesquehoning Creek near its confluence with the Lehigh River. The Lausanne Tunnel mine pool overflow is accessed through a well drilled approximately 40 feet deep that intercepts the tunnel drainage about 500 feet upstream of the Tunnel's exit.

The docket holder also purchases water from NBA's Fourth Hollow Reservoir. The reservoir is situated on Broad Run approximately one mile north of Nesquehoning Creek and two miles west of the Nesquehoning Borough town center in the Lehigh River Watershed.

Specific location information has been withheld for security reasons.

3. Area Served. The project water withdrawal and water supply interconnection from NBA will continue to serve only the docket holder's cogeneration facility. 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 84-megawatt electric cogeneration facility utilizes a circulating fluidized bed boiler to burn anthracite coal breaker refuse which is piled on nearby areas. The facility is designed to consume the breaker refuse at a rate of 80 tons per hour and generates 800,000 pounds of steam per hour. No alternate uses for steam are currently proposed, but the docket holder is exploring this option. Water is used at the facility for cooling purposes, industrial processes, and fire suppression. The average and peak water demands of the facility are 1.18 mgd and 2.23 mgd, respectively. The docket holder expects no increase in the 10-year water demand of the facility.

The primary water supply is from an interconnection with the NBA's fourth Hollow Reservoir. The NBA withdrawals are described in DRBC Docket No. D-1994-047 CP-2, approved on December 10, 2014. PADEP Water Allocation Permit No. WA 13-627B permits NBA to withdrawal up to 1.2 mgd of water, based on a 30-day average, as a seasonal taking, when available, from the Fourth Hollow Reservoir for use only at the PCEF. The PADEP water allocation permit limits the withdrawals from the reservoir based on reservoir water elevations and requires conservation releases.

When water from the reservoir is not available, the docket holder withdraws up to 2.23 mgd (69.2 mgm) from the Lausanne Tunnel mine pool overflow. The Lausanne Tunnel is a drainage facility (approximately 7,000 feet long, 9 feet wide and 6 feet high) that conveys water from the mine pool overflow to the Lehigh River. Water from the Lausanne Tunnel mine pool requires pumping over 7 miles and extensive pre-treatment of the raw mine water for cooling and boiler make-up. The use of Fourth Hollow Reservoir, which is closer to the cogeneration facility, saves the docket holder energy and treatment costs while providing income to the municipality. Because the cleaner NBA water allows for efficient recycling, less water is needed to serve the docket holder's needs.

Consumptive use is 100 percent of the total water use with approximately 85 percent of the raw water lost to evaporation, and approximately 0.26 mgd (15 percent) consumed through use to stabilize ash and control fugitive airborne emissions from material handling operations. Ash is temporarily stored in silos. A pugmill beneath the silos stabilizes the ash through mixture with water. Any leakage from the pugmill is collected by the drainage system and recycled to an oil-water separator and the water treatment facilities.

5. Facilities. The project facilities consist of a raw materials screening plant (raw materials hauled by truck), a circulating fluidized bed boiler with a steam turbine and an electric generator, an air pollution control device, raw water pretreatment units, an oil-water separator, a neutralization basin, a cooling tower, and ash processing facilities. An impoundment is provided for culm stockpile runoff.

The Fourth Hollow Reservoir is connected to the facility's 14-inch diameter force main with approximately 1,000 linear feet of 10-inch diameter iron pipe. The connection is made in a pre-cast concrete valve pit and includes isolation/shutoff valves and back-flow check valves on both the 10-inch diameter pipe from the reservoir and the 14-inch diameter pipe from the Lausanne Tunnel source to enable use of either supply as required by operating conditions.

Raw water from the Lausanne Tunnel intake is considered acid mine drainage. The docket holder applies extensive treatment including clarification, softening, filtration and pH adjustment prior to use.

All water sources are metered.

The project facilities are above the 100-year flood elevation.

6. Other. The facility does not discharge any wastewater. Process wastewater, which is applied to ash, is used as part of the reclamation of the nearby refuse banks. Cooling tower blowdown will continue to be utilized for ash stabilization and dust control. A groundwater monitoring program is required by the PADEP Bureau of Mining, Office of Surface Mining to periodically determine ground water quality up-gradient and down-gradient from the proposed ash reclamation areas.

Potable water is supplied by NBA as described in DRBC Docket No. D-1994-047 CP-2, approved on December 10, 2014.

Sanitary wastewater from the facility is conveyed to the NBA sewage treatment plant most recently approved by DRBC Docket No. D-90-107 CP-4 on September 8, 2022.

The docket holder has constructed 2 electric transmission line crossings of the Schuylkill River. These projects are described in detail in DRBC Dockets Nos. D-88-46 and D-91-52, which were approved by the Commission on September 28, 1988 and December 11, 1991, respectively. The crossings extend from Port Clinton Borough, Schuylkill County across the Schuylkill River to Tilden Township, Berks County, Pennsylvania. The second transmission line extends from the Borough of Hamburg to Tilden Township, both in Berks County, Pennsylvania. The electric lines transmit power from the PCEF.

B. FINDINGS

1. Special Protection Waters

In 1992, the DRBC amended its Water Quality Regulations (WQR) by the addition of regulations for the protection of Special Protection Waters (SPW), designed to maintain the quality of interstate waters where existing quality is better than the established stream quality objectives. As the result of its initial classifications and subsequent amendments, the Commission has designated the entire non-tidal main stem Delaware River from Hancock, New York to Trenton, New Jersey as SPW. DRBC's SPW regulations apply within the designated reaches and their drainage area.

The docket holder's facility and water supplies are located within the drainage area to SPW. Sections 3.10.3A.2.e.1) and 2) of the WQR state that projects subject to review under Section 3.8 of the Compact that are located within 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.

Since this project involves the renewal of an approval for existing activities and does not entail additional construction or expansion of facilities or create new or increased non-point source loads, the NPSPCP requirement is not applicable at this time. Condition C.27. of this docket provides that at such time, if ever, as additions to the area served by the docket holder's withdrawals are proposed, the docket holder will be required to demonstrate compliance with an approved NPSPCP in accordance with DRBC's SPW regulations.

2. Drought Management and Contingency Plans (DMCPs) for Water Withdrawal greater than 1 mgd

Section 2.3.5.1 C. of the Commission's *Rules of Practice and Procedure (RPP)*, requires industrial and commercial water withdrawals in excess of one million gallons per day to develop a contingency plan including emergency conservation measures to be instituted in the event of a Commission declared drought or other water shortage. Resolution No. 83-14 amended the Commission's *Water Code* (Section 2.1.4) to include the conservation goal of a 15 percent reduction in depletive use during drought conditions. On December 24, 2012, the docket holder submitted a DMCP dated March 2003, revised December 2012 to the Commission. The DRBC Executive Director approved the DMCP on May 29, 2013. The docket holder shall implement the DMCP upon direction by the Executive Director. (see Section C. DECISION condition C.26.).

3. Surface Water Charges

The docket holder currently reports water use and pays surface water fees to the Commission on a quarterly basis for water supplied by NBA's Forth Hollow Reservoir. Mine drainage water from the Lausanne Tunnel intake is considered groundwater and is not subject to Commission Water Charging Regulations. The docket holder shall 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.3.)

4. Consumptive Use and Consumptive Use Replacement Plan

The project withdrawals used for the purpose of industrial cooling and process result in a consumptive use of 100 percent of the total water use. The DRBC definition of consumptive use is defined in Basin Regulations-Water Supply Charges 18 C.F.R. 420.1(d). Based on the allocations approved by this docket, the electric generating or cogenerating facility will continue to consumptively use up to 2.23 mgd of water provided by groundwater from the Lausanne Tunnel (mine drainage) and up to 1.2 mgd (based on a daily average) from the interconnection with NBA (a combined total consumptive use of 69.2 mgm).

The original approval for the PCPO facility preceded DRBC's policy for non-utility generators to make-up their consumptive water use during drought conditions. As no expansion of power output is proposed, PCPO will not be subject to consumptive use makeup requirements during critical hydrologic conditions. However, any increase in consumptive water use, to serve the expansion of power facilities, will be subject to DRBC policy for the replacement of water consumptively used by electric generating or cogenerating facilities during critical hydrologic conditions in accordance with Resolution No. 2018-5 (See Section C. DECISION condition C.29.).

5. Other Findings

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

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. DECISION

Effective on the approval date for Docket No. D-1987-066-7 below, Docket No. D-1987-066-6 is terminated and replaced by Docket No. D-1987-066-7. 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 docket holder shall continue to report to the PADEP all surface and groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

2. The project withdrawals shall be metered by means of an automatic continuous recording device, flow meter, or other method, and shall be measured to within 5 percent of actual flow. Meters or other methods of measurement shall be subject to approval and inspection by the PADEP as to the type, method, installation, maintenance, calibration, reading and accuracy. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.

3. The docket holder shall pay for surface water use in accordance with *Basin Regulations – Water Supply Charges 18 C.F.R. Part 420*.

4. The docket holder shall implement to the satisfaction of the PADEP, a continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

Other Conditions

5. During any month, the combined withdrawal from all well sources shall not exceed 69.2 million gallons. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

SOURCE	MAXIMUM DAILY RATE	MONTHLY ALLOCATION
Lausanne Tunnel	2.23 mgd	69.2 mg
NBA Forth Hollow Reservoir	1.2 mgd*	36 mg/30 days

* Daily allocation is based on a 30-day average in accordance with Condition No. 13 of PADEP Water Allocation Permit No. WA 13-627B added by Modification Order No. 2 dated, February 28, 2001

6. During any month, the consumptive use shall not exceed 69.2 million gallons. Any increases in the water withdrawal or consumptive use allocation requires Commission approval under Section 3.8 of the Compact.

7. When the Fourth Hollow Reservoir water level is at an elevation of 1,213.5 feet above mean sea level (4.0 feet below the spillway) or lower the docket holder shall discontinue the use of the NBA reservoir supply and use only the Lausanne Tunnel source.

8. In accordance with 18 C.F.R. 401.8. of the Commission's *Rules of Practice and Procedure (RPP)*, if at any future time the Project is changed substantially from the Project as described in this docket, it will be deemed to constitute a new and different project for the purposes of Article 11 of the Delaware River Basin Compact and will require Commission amendment of the Comprehensive Plan. In accordance with the same section of the RPP, whenever a change to the Project is made, the sponsor must advise the Executive Director, who will determine whether the change is deemed substantial for purposes of this provision.

9. Section 2.3.10 of the Commission's Rules of Practice and Procedure (18 C.F.R. 401.41), limiting the Commission's approval to three years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. 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.

10. 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 or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If 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, the terms and conditions of the current docket will remain fully effective and enforceable pending the grant or denial of the application for docket approval.

11. During any month, consumptive use may not exceed 2.23 mgd for use at the electric generating facility.

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

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

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. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

16. 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.

17. 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.

18. 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*.

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. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the docket holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the docket holder shall provide written notice to all potentially affected water users of the docket holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the docket holder's project withdrawal shall be repaired, replaced or mitigated at the docket holder's expense.** The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the docket holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

24. 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.

25. 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.

26. The docket holder shall implement the DMCP upon direction by the Executive Director.

27. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

28. The applicant shall make use of 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. The applicant shall assume all responsibility for any claims arising from the proposed wastewater uses and shall indemnify and hold harmless the Commission against and from any and all claims made by or on behalf of any person arising from any uses of wastewater made by the applicant.

29. If the docket holder expands its facility beyond 84 megawatts as a result of modifications to include an increase in water withdrawal and consumptive use, the applicant shall provide makeup water from a suitable source that is equal to the additional amount consumed.

30. 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: March 8, 2023

EXPIRATION DATE: March 8, 2033