

Susquehanna River Basin Commission

a water management agency serving the Susquehanna River Watershed



TO ALL CONCERNED:

At the September 12, 2007 meeting, the draft minutes of the June 13, 2007 Commission meeting were approved as written. Please attach this notice to your copy of the June 13, 2007 minutes.

- DRAFT -

SUSQUEHANNA RIVER BASIN COMMISSION
1721 N. FRONT ST.
HARRISBURG, PA 17102

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION
September 12, 2007
#2007-03**

The meeting was held at the Grand Royale Hotel, 80 State Street, Binghamton, New York. Chairwoman Myers called the meeting to order at 8:31 a.m.

ROLL CALL

Commissioners Present

**Alternate Commissioners
and Advisors Present**

Ms. Cathleen C. Myers, Dep. Sec. for Water Management, Pa. Dept. of Environmental Protection (PADEP)

Mr. Herbert Sachs, Special Projects Coordinator, Maryland Dept. of the Environment (MDE)

Col. Peter W. Mueller, Dist. Engineer, U.S. Army Corps of Engineers (USACE), Baltimore District

Mr. Kenneth P. Lynch, Director, Region 7, N.Y. Dept. of Environmental Conservation (NYDEC)

Ms. Amy M. Guise, Chief, Civil Project Development Branch, USACE, Baltimore District

Staff Present

Mr. Paul O. Swartz, Executive Director

Mr. Thomas W. Beauduy, Deputy Director

Mr. Michael G. Brownell, Chief, Water Resources Management Division

Ms. Susan S. Obleski, Director of Communications

Mr. David W. Heicher, Chief, Watershed Assessment & Protection Division

Mr. Duane A. Friends, Chief Admin. Officer

Mr. Richard A. Cairo, General Counsel

Ms. Deborah J. Dickey, Secretary to the Comm.

Also Attending

Mr. John Booser, PADEP

Ms. Sarah Lopas, Nuclear Regulatory Commission

Ms. Marjorie McLaughlin, Nuclear Regulatory Commission

Mr. Ray Yacuzzo, NYDEC, Region 8

INTRODUCTION/WELCOME

Chairwoman Myers introduced Commissioner Kenneth Lynch who offered a welcome to New York State for all those in attendance. He also mentioned the previous day's groundbreaking for the Whitney Point Section 1135 Modification Project that will be providing both environmental and recreational benefits. He noted the attendance of the Asst. Secretary of the Army for Civil Works, John Paul Woodley, Jr., at the groundbreaking ceremony.

Commissioner Mueller also referred to the Whitney Point groundbreaking ceremony, adding that the U.S. Army Corps of Engineers and its construction contractor are anxious to commence work on the project. He went on to point out that Corps flood control projects had reduced damages by \$500 million in the flooding of June 2006. On his tour of the area, Asst. Sec. Woodley had seen first-hand the projects that had contributed so much to this success. Commissioner Mueller also acknowledged the presence of other federal government representatives at the meeting.

The Executive Director pointed out that New York was the first state to enact enabling legislation for the Susquehanna River Basin Compact. He reminded New Yorkers that they are a downstream as well as an upstream state, receiving the waters of the Tioga River from Pennsylvania. He also acknowledged the Upper Susquehanna Coalition (USC), a group that is working hard in New York and Pennsylvania to improve water quality conditions.

Chairwoman Myers noted the importance of the Whitney Point Section 1135 Modification Project to Pennsylvania, which has suffered from a series of recent droughts. Effective water resources management means having the ability to mitigate low flows. This project will provide that ability by sending an influx of fresh water to the downstream points, thereby assisting recreational users, fish and wildlife and public water suppliers.

She also mentioned the new emphasis on flood damage mitigation in the Delaware River Basin, where three major storms have hit in the last two years. With similar experiences in parts of the Susquehanna Basin, she expects flood damage reduction to be a very active theme for both SRBC and DRBC in the coming year.

1. Minutes of the June 13, 2007 Commission Meeting

On a motion by Commissioner Sachs, seconded by Commissioner Lynch, the minutes of the regular business meeting of June 13, 2007 were unanimously adopted as written.

PRESENTATIONS

2. Presentation and Panel Session – New York State's Involvement in the Chesapeake Bay Program

The Commission convened a panel session on New York State's involvement in efforts to restore the Chesapeake Bay. Participating in the panel session were Mr. Jeffrey Lape,

Director, Chesapeake Bay Program, USEPA; James Curatolo, Watershed Coordinator, Upper Susquehanna Coalition (USC); Lindsay Wickham, Field Advisor, New York Farm Bureau, Region 5; and Cathy Aingworth, Superintendent, Binghamton-Johnson City Joint Water Treatment Plant. Commissioner Lynch of New York moderated the panel.

Prior to the panel's discussion, SRBC Watershed Assessment and Protection Chief David Heicher made a presentation on SRBC Chesapeake Bay activities. He detailed the Commission's involvement in such programs as the evaluation of the effectiveness of New York sewage treatment plant in the Susquehanna Basin, restoration of migratory fish runs, the Mid-Atlantic Panel on Invasive Species, the Sediment Task Force, sediment and nutrient monitoring, interstate stream monitoring and large river assessment.

Commissioner Lynch prefaced the panel discussion with a comment regarding New York's recent release of its Chesapeake Bay nutrient reduction strategy. While the strategy was a bit slow in coming together, through hard work and the cooperative efforts of many persons, the state now feels that it has a good product that will make a significant contribution to restoring the Bay. He then moved ahead with questions for each of the panelists.

Commissioner Lynch asked Mr. Lape about what he had learned from his extensive meetings with stakeholders in the Chesapeake Watershed. Mr. Lape said that he had traveled throughout the watershed and gathered the views of stakeholders on priority issues for the Bay. What he had learned had convinced him that there needs to be a fundamental change in the approach to the Bay cleanup. The partnership needs to expand, with full Executive Council membership for New York State.

The number of goals established in the 1999 agreement (102) is unrealistically large. Instead, there needs to be more focus on priorities and on increasing the amount of implementation grants. The number and purpose of the numerous committees and sub-committees involved in the bay program should be re-considered and improved communications with people in the watershed should be a priority.

Commissioner Lynch asked Jim Curatolo how the USC had developed its grassroots based non-point source strategy. Mr. Curatolo first described the USC, an organization serving 16 counties in New York and three in Pennsylvania. Essentially, the USC sat down with water managers and figured out how to make use of things like wetlands and stream buffers to address the problem of non-point source pollution.

Commissioner Lynch asked Lindsay Wickham whether the programs and funding levels in the Farm Bill, some of which are targeted to Chesapeake Bay, are adequate to help New York farmers meet the objectives of New York's tributary strategy. He indicated that there would always be room for more funding. New York farmers have been able to make good use of these conservation and technical assistance programs to improve their farms. Funding not only helps implement conservation practices, but helps in the maintenance of these practices. Commissioner Lynch praised the county conservation districts for the good work they are doing to help farmers implement these conservation practices.

Cathy Aingworth described the state of the art features of the upgraded Binghamton-Johnson City Sewage Treatment Plant that are contributing to nutrient reduction. Wastewater travels through three stages of nutrient removal and is expected to meet all goals for nitrogen and phosphorus removal. Completing work on the project was a severe challenge, with three floods hitting the construction site in two years, one of which caused \$10 million in damages. Most of the money for the upgrade came from the ratepayers.

Jeff Lape was asked if he was optimistic that a TMDL would not have to be prepared for the Bay. He noted that, at the present pace, water quality goals were not being achieved and there was a legal expectation that a TMDL would have to be prepared. Meanwhile, however, implementation efforts would be ramped up. Commissioner Myers agreed that a TMDL would probably be needed but that the states should continue to do the things that are working.

When asked if he felt that New York will receive a fair share of the Bay cleanup resources, Jim Curatolo said that if New York has effective proposals for nutrient reduction, it would receive its fair share. These resources should not necessarily be allocated by geographic location, but should go where they can be used most effectively. Also, to achieve success, programs should have a local focus with an emphasis on local benefits.

Lindsay Wickham responded that, three years ago, New York was not receiving its fair share of the resources, but that the situation has now improved and is going in the right direction. There is also much better collaboration with neighboring states. Kathy Aingworth pointed out that the \$4.8 million that the Binghamton-Johnston City Plant upgrade had received from USEPA was helpful to the effort, but that more would have reduced some of the burden placed on the ratepayers.

Chairwoman Myers added that the states are hoping that the federal government will stop shrinking the amount of money that is being devoted to important infrastructure. Certainly, it made good sense to add these new features to the plant during a major upgrade and she congratulated Binghamton/Johnson City on its initiative and its success.

Chip McElwee of the Broome County Soil and Water Conservation District inquired whether interstate nutrient trading was something that could be considered. Chairwoman Myers said that interstate nutrient trading is not possible yet under the present rules, which assess water quality at the point where it leaves a state.

On the question of freshwater inflows to the Bay, Mr. Lape emphasized that it is absolutely essential that adequate flows are sustained to maintain the Bay's health and productivity. That is why the programs of the SRBC that regulate withdrawals and consumptive uses are so important.

Mr. Curatolo related some of the experiences of the USC in garnering both Congressional support and support from USEPA for various programs such as erosion and sedimentation control, wetlands construction, and road maintenance practices. USC has also received the support of Congressman Hinchey for a heritage river designation.

When asked about the perspective of New York farmers on their participation in efforts to clean up the Bay, Lindsay Wickham indicated that the desire to be good stewards of the land is probably more of a motivating factor to farmers than the Bay. This perspective reinforces Mr. Curatolo's point that the New York tributary strategy must emphasize local benefits to motivate land owners and water users.

Commissioner Lynch thanked the members of the panel for their participation and their insights, which will surely be helpful to Mr. Lape and the work of the Chesapeake Bay Program.

ACTION ITEMS

PUBLIC HEARING (Note: At the meeting, this item was moved to the end of the agenda.)

The Commission convened a public hearing covering two topics: 1) action on project applications, and 2) rescission of a project docket for Northampton Fuel Supply Company, Inc., Prospect Bank Operation. A stenographic transcript was made of this hearing and is part of the Commission's record.

3. Regulatory Program Actions

a. Project Applications

Michael Brownell first provided some background information on the Commission's review authority and its consumptive use and water withdrawal regulations. The main purpose of these regulations is to avoid adverse environmental impacts and conflicts among users, particularly during periods of drought and low flow. Cumulative impacts are also considered. He explained the methods available for compliance with the consumptive use regulation, including discontinuance of use, provision of storage water, and payment into the SRBC Water Management Fund to enable purchase of water storage for release during low flow periods.

Mr. Brownell listed the standard requirements for each project sponsor, including: 1) notice of application, 2) coordination with member jurisdictions, 3) aquifer tests for groundwater withdrawals, 4) metering, monitoring, and reporting of water use, 5) mitigation or other special conditions where there is a potential for adverse impacts, 6) a right of inspection to ensure compliance, 7) water conservation standards, and 8) docket reopening authority.

The dockets recommended for action included the following projects¹:

- Town of Erwin (Wells 2 and 3, & ID Well 1 (Modification)(Exhibit A1)
- South Slope Development Corp., Song Mountain Ski Resort (Exhibit A2)
- Bionol Clearfield LLC (Exhibit A7)
- Walker Township Water Assoc. (Snydertown Well 3) (Exhibit A8)

¹ Docket decisions are not included with the hard copy of the minutes. However, they are available upon request and at www.srbc.net.

- AES Westover, LLC (Exhibit A3)
- Town of Cohocton (Well 3) (Modification) (Exhibit A4)
- Northampton Fuel Co., Inc., Loomis Bank Operation (Modification) (Exhibit A5)
- PPL Susquehanna, LLC, Susquehanna Steam Electric Station (Exhibit A6)
- Bedford Twp. Municipal Authority (Bowman Tract Wells 1 & 2) (Modification) (Exhibit A9)
- Dillsburg Area Authority (Well 7) (Exhibit A10)
- PPL Brunner Island, LLC, Brunner Island Steam Electric Station (Exhibit A11)

Mr. Brownell indicated that he would present information for all the projects except PPL Susquehanna, LLC, which he would reserve for separate description and separate Commission action. He went on to describe these projects and the proposed conditions of approval for each, noting first that project sponsor Charles Header Laurel Springs Development had requested that its project be tabled.

With respect to South Slope Development Corporation – Song Mountain Ski Resort, the Song Lake Property Owners Association had requested that the applicant be ordered to provide certain monitoring data directly to it. As in the case of the Faraway Springs project acted on at the last meeting of the Commission, the staff does not feel that the direct provision of data by the project sponsor to an outside group is an appropriate procedure. SRBC staff will instead provide the requested monitoring data to the group.

South Slope did fail to provide the required 10-day published notice of the filing of an application with SRBC. Nevertheless, staff felt that there was adequate notice given to interested parties in other forms that provided sufficient notice and opportunity for comment. Therefore, staff recommended that the 10-day notice requirement be waived.

Attorney Kathy Bennett appeared on behalf of South Slope Development Corporation – Song Mountain Ski Resort. She indicated that her client believed that it was not possible to comply with certain deadlines in the docket pertaining to metering. More time was needed because the operation employs only three full time persons. There were other concerns about docket conditions, including a perceived danger of counting withdrawals twice as they moved first into Pond 2 and then on to snow making operations.

Finally, she noted that the failure to publish a notice of South Slope’s application to the Commission was an unintentional oversight, probably linked to the company’s intense focus on meeting the Commission’s requirements pertaining to aquifer testing. There had been actual notice of the application to interested parties and a notice was published in a newspaper about 20 days in advance of this hearing. Federal court cases indicate that such notice defects are curable and she maintained that this defect had indeed been cured through subsequent action of the project sponsor. The error was therefore harmless in nature and basic due process concerns were satisfied.

Commissioner Lynch indicated that he was pleased that basic notice requirements were satisfied through actual notice and he was therefore prepared to approve a waiver of the formal notice requirement as proposed by staff. His main concern was with allowing the project to move forward now that staff appears to have the company on the right track.

In response to Ms. Bennett's comments, Mr. Brownell stated that he believed there are simple solutions to all of the concerns that she raised. From inspections conducted at the site, staff does not agree that meeting the stipulated deadlines is impossible. Staff is prepared to lend additional assistance to South Slope personnel to ensure compliance. If it becomes apparent later that there are justifiable reasons why deadlines cannot be met, staff will consider extensions at that time.

Commissioner Lynch agreed that the docket conditions were necessary to meet the concerns raised by the local homeowners association. The best course for South Slope would be to initiate further discussions with SRBC staff as soon as possible to resolve the perceived problems and begin the work of implementing all docket requirements.

On a motion by Commissioner Sachs, seconded by Commissioner Lynch, the Commission unanimously approved the recommendations of staff concerning the first ten projects presented and the tabling of the Charles Header Laurel Springs Development application.

Mr. Brownell then turned to the application of PPL Susquehanna LLC requesting an increase in consumptive water use and approval of surface water and ground-water withdrawals for processes related to an increase in power production and continued operations at the Susquehanna Steam Electric Station (SSES). This increase in power production is known in the industry as an "uprate." Commission staff had coordinated its review of this application with the Nuclear Regulatory Commission (NRC).

The SSES consumptive use was previously approved by the SRBC in docket No. 19950301 of March 1995, which incorporated the terms of a number of related Commission resolutions adopted prior to the approval of that docket. This approval also covered a "stretch uprate" that had also been approved by the NRC that involved an increase in consumptive use of approximately 3.1%. The Commission found at that time that water storage in the Cowanesque Reservoir allocated to SSES was sufficient to mitigate for consumptive loss of approximately 40 million gallons per day (mgd), based on a 30-day average. This stretch uprate would account for all of the storage available at Cowanesque. Any additional consumptive use would require mitigation in some other form.

In 2001, PPL applied to and received from NRC approval for a so-called "measurement uncertainty recapture" uprate. No similar approval application was submitted to the Commission at that time, though the effect of this uprate was to increase the amount of consumptive use by SSES.

In October 2006, PPL submitted another application to NRC for approval of an "extended power uprate" or EPU to increase the thermal power level of both units at SSES. This would increase the limit of each unit by about 13%. As expected, this increased power will result in an increase in peak and average consumptive use, and in the surface water withdrawal, that cannot be mitigated solely by the storage at Cowanesque Reservoir. PPL Susquehanna is now asking the SRBC to approve this increase in consumptive use. As part of this approval, PPL is proposing to replace two of the four carbon steel river intake pipes with stainless steel pipes to

eliminate the corrosion and fouling problems that have prevented accurate measurement of the consumptive use and withdrawal.

The Commission staff believes that the second measurement uncertainty uprate implemented in 2001 and 2002 caused an increase in the amount of water withdrawn at the project in excess of 100,000 gpd and was therefore subject to Commission approval.

As explained by its Counsel, Ms. Arundhati Khanwalkar, PPL alleges that the 2001 measurement uncertainty uprate was not an increase in consumptive use, but merely an allowance by the NRC for PPL to operate with a smaller margin of safety because of more accurate monitoring. Nevertheless, PPL did not wish to litigate the matter and had therefore offered a settlement in lieu of civil penalties in the amount of \$500,000. Counsel added that there was no intention on the part of PPL to violate the Commission's regulations and that this had simply been an honest misunderstanding. The Commission staff recommended acceptance of this settlement offer.

One final issue involved the length of the approval for this uprate, which essentially constitutes a modification of the original 1995 docket approval. PPL asked for a 37-year approval term to correspond to a requested NRC license extension. Mr. Brownell pointed out that the requested extension had not yet been granted by NRC. Staff therefore recommended an 18-year approval term, which would essentially fill out the remainder of the term granted by the 1995 approval.

Deputy Director Beauduy then addressed the Commission concerning a series of filings made with the Commission by Mr. Eric Epstein regarding the Commission's consideration of the PPL Susquehanna LLP application for an uprate at SSES. Mr. Epstein is a resident of the Susquehanna River Basin near Harrisburg, Pa. The Commission had been supplied with copies of those filings in advance of today's meeting. He went on to summarize their contents.

The main filing on August 1, 2007 was a document labeled as a petition in opposition to the application of PPL Susquehanna LLP that was before the Commission at today's meeting. As part of this petition, Mr. Epstein requested that the Commission postpone any action on the application and schedule a public input hearing in the vicinity of the SSES project. The petition also raised six contentions, each of which was described and responded to by the Deputy Director. (A detailed description of the contentions and responses thereto are contained in the hearing transcript.)

On August 15, 2007, the SRBC staff notified Mr. Epstein that the contents of the petition were accepted as public comments on the record pertaining to the PPL Susquehanna LLP application. With respect to his request for a hearing, staff further informed him of the Commission's plans to hold a public hearing in Binghamton on September 12, 2007 and invited him to appear before the Commission at that time.

On August 31, 2007, Mr. Epstein filed another document containing a notice of appearance for the September 12, 2007 public hearing in Binghamton, a motion to postpone action on the PPL Susquehanna LLP application, and a list of data requests to the Commission.

He objected to the holding of the public hearing 109 miles away from the SSES facility where he said members of the interested public would find it difficult to attend, and repeated his request that a public input hearing be held in the vicinity of SSES.

The Deputy Director pointed out that SRBC meetings are held only four times per year at pre-planned locations throughout the Susquehanna River Basin. The Commission acts on multiple project applications at these meetings and cannot possibly tailor the location of its meetings to the locations of these projects.

The Commission staff responded to Mr. Epstein on September 5, 2007, telling him that his request for postponement and public input hearing would be put before the Commission as requests on September 12, 2007. A copy of the draft docket was sent to him, along with a copy of the settlement offer that had been received from PPL.

Staff also told Mr. Epstein that his data requests were in the nature of a discovery request more common in a court or other adversarial proceedings. Discovery rules do not apply to Commission procedures for review and approval of projects. Instead, he was invited to come to the Commission's offices to inspect or copy any documents relating to the PPL Susquehanna LLP matter. Staff further explained that, contrary to one of his contentions and to a suggestion in two of his data requests, the SRBC had not waived its regulations with respect to the 2001 measurement uncertainty uprate.

On September 10, 2007, Mr. Epstein replied, indicating that he would not be appearing at the September 12 hearing in Binghamton and instead asked that his response be included in the record of the hearing. He reiterated his previous request that the Commission postpone action on the PPL Susquehanna LLC docket and hold a public input meeting in the vicinity of the project. He made several other statements indicating his displeasure with what he regarded as a "bureaucratic maze" and an "insider's game" with respect to the handling of this matter.

On that same day, September 10, 2007, staff completed certain modifications that it felt were appropriate to the draft docket, and then provided a copy of that modified docket to Mr. Epstein to update the earlier draft that was provided to him on September 5. Mr. Epstein has since complained that staff provided him the modified draft only 48 hours before the Commission's meeting on September 12. The Deputy Director handed a copy of Mr. Epstein's September 10 filing to the stenographer for inclusion in the hearing record.

Chairwoman Myers indicated her agreement with the Deputy Director's response to all of Mr. Epstein's statements and contentions and asked for a motion to approve the recommendations of staff with respect to the PPL Susquehanna LLP application and to accept the settlement offer of \$500,000. On a motion by Commissioner Lynch, seconded by Commissioner Sachs, the motion suggested by Chairwoman Myers was unanimously adopted.

b. Rescission Action – Northampton Fuel Supply Company, Inc.

Northampton Fuel Supply Company, Inc., (Docket No. 2004903) has ceased operations at its Prospect Bank location and had formally terminated its lease. It therefore requested that

the Commission rescind the docket approval for its project at that site. On a motion by Commissioner Lynch, seconded by Commissioner Sachs, the Commission unanimously approved the rescission of the docket for Northampton Fuel Supply Company, Inc. at the Prospect Bank location.

4. Proposed Rule Making: Agricultural Consumptive Use

The Deputy Director presented a proposed rule making action (Exhibit B) to the Commission to revise the current project review regulations in recognition that the member states are making provisions for the mitigation of agricultural consumptive use in their respective jurisdictions. Mitigation projects being implemented by the member states will provide about 75 mgd for mitigation.

Under the main revision to 18 CFR §806.4 (a)(1), if the Commission determines that low flow augmentation projects sponsored by the Commission's member states provide sufficient mitigation for agricultural water use to meet the standards for consumptive use set forth in 18 CFR §806.22, such agricultural water use projects will not be subject to the requirements of §806.4. Another minor revision will modify the definition of "agricultural water use" to make clear that it is only the raising of "turf products" for sale that qualifies as an agricultural water use, not the mere growing of turf. A third revision makes a minor correction to an authority citation in Part 808.

Upon approval of the proposed rule making action by the Commission, staff will publish a proposed rule making notice in the Federal Register and the state notice publications, and schedule a public hearing. On a motion by Commissioner Sachs, seconded by Commissioners Lynch, the Commission unanimously approved the proposed rule making action presented by the Deputy Director.

5. Grant/Contract Approvals

Watershed Assessment and Protection Chief David Heicher presented a grant and four contracts for the approval of the Commission:

- a. Grant Approval – Development of Total Maximum Daily Loads (TMDLs) for Selected Water bodies in the Susquehanna River Basin

Under this grant, the Commission will continue to assist PADEP in the development of TMDLs for selected water bodies during FY-2008. The PADEP will contribute \$208,000 toward this work.

- b. Contract Approval – Water Resources Technical Assistance Center

The Commission has contracted with the Delaware River Basin Commission to assist the Commission in completing a grant from PADEP to implement the establishment and maintenance of a statewide Water Resources Technical Assistance Center for water conservation. The contract amount is \$35,000.

c. Contract Approval – Technical Services – William A. Gast

The Commission has contracted with William A. Gast, Professional Engineer, to provide technical services to the Commission and the PADEP. The amount of the contract is \$30,000.

d. Contract Approval – Legal Services – Richard A. Cairo

The Commission has contracted with Attorney Richard A. Cairo to continue as the Commission’s Legal Counsel. The amount of the contract for a period of one year is \$66,000.

e. Contract Approval – Upgrade Project Review Files

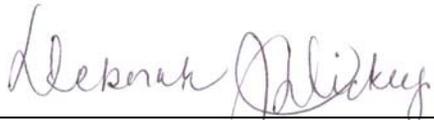
This is a request to the Commission to upgrade the SRBC project review data base and scan existing files into the Commission’s document management system. The estimated cost is \$100,000.

On a motion by Commissioner Lynch, seconded by Commissioner Mueller, the Commission unanimously approved/ratified the grant and contracts presented by staff.

ADJOURNMENT

After some brief discussion of an upcoming retreat on the revision of the SRBC Comprehensive Plan, the Chairman adjourned the meeting at 12:08 p.m. The next regular meeting of the Commission is scheduled for December 5, 2007 in Lancaster, Pennsylvania.

Date Adopted



Deborah J. Dickey
Secretary to the Commission



SUSQUEHANNA RIVER BASIN COMMISSION

Exhibit A1

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Docket No. 20070602-1

Approval Date: June 13, 2007

Modification Date: September 12, 2007

TOWN OF ERWIN

Groundwater Withdrawals (30-Day Averages) of 0.576 mgd from Well 2,
0.576 mgd from Well 3, 0.360 mgd from ID Park Well 1,
and 0.504 mgd from ID Park Well 2,
and a Total System Withdrawal Limit (30-Day Average) of 2.510 mgd,
for Public Water Supply,
Town of Erwin, Steuben County, New York

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the request for modification on June 8, 2007.

Description

Purpose. The purpose of the modification is to request approval for increases in groundwater withdrawals from Well 2 from 0.350 million gallons per day (mgd) to 0.576 mgd, from Well 3 from 0.325 mgd to 0.576 mgd, and from ID Park Well 1 from 0.125 mgd to 0.435 mgd, as 30-day averages. No request has been made to increase the withdrawal from ID Park Well 2 or the total system withdrawal limit.

The Commission originally approved the project on June 13, 2007, as Docket No. 20070602 (docket). As approved, the project sponsor was authorized to withdraw (30-day averages) of 0.350 mgd from Well 2, 0.325 mgd from Well 3, 0.125 mgd from ID Park Well 1, and 0.504 mgd from ID Park Well 2 for use in the public water supply system, subject to conditions enumerated in the docket. The approved withdrawals were based on data submitted by the project sponsor for past average water use. The current usage and future water needs are more than reported in the original application. According to the project sponsor, industrial water demands being made on the public water supply system are increasing as industry expands.

A constant-rate aquifer test of ID Park Well 1 was completed on July 12-14, 2004, at a pumping rate of 445 gallons per minute (gpm) (0.641 mgd), and Commission staff has determined that additional testing of this well is not necessary.

The New York State Department of Conservation (NYSDEC) has approved withdrawal limits as shown below.

Well ID	WSANUM Permit No.	NYSDEC Approved Capacities (gpm)
Well 2	5696	400
Well 3	6475	400
ID Park Well 1	6382	250

This docket modification approves the requested increases from Wells 2 and 3. The requested quantity for ID Park Well 1 is greater than the limit currently permitted by NYSDEC. Commission staff recommends approval of an increased withdrawal from ID Park Well 1 to equal the limit approved by NYSDEC. The docket modification also changes certain provisions contained within the docket.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §806.4(2).

Commission staff recommends approval of 30-day average withdrawal quantities of 0.576 mgd from Well 2, 0.576 mgd from Well 3, and 0.360 mgd from ID Park Well 1. These withdrawal limits equal the NYSDEC approved limits.

The maximum instantaneous withdrawal rates at the wells should be limited to the capacities currently approved by NYSDEC. Commission staff recommends maximum instantaneous withdrawal rates of 400 gpm, 400 gpm, and 250 gpm, respectively, for Wells 2, 3, and ID Park Well 1.

Commission staff recommends that the 30-day average withdrawal limit of 0.504 mgd, and the instantaneous pumping rate of 350 gpm, from ID Park Well 2 be maintained at the current rates.

Commission staff recommends that the total system withdrawal limit of 2.510 mgd be maintained at its current rate.

For Wells 2, 3, and ID Park Well 1, Commission staff recommends waiving the requirement for the aquifer testing, as per Commission Regulation §806.12, due to the nature of the hydrogeologic setting and operation history. Commission staff reviewed the results of the aquifer test at ID Park Well 1, conducted from July 12-14, 2004, to evaluate its application.

Commission staff finds that there is likely minimal impact to any existing nearby water users and the aquifer. Commission staff also evaluated groundwater availability in the vicinity of ID Park Well 1 and ID Park Well 2.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation, and the Town of Erwin reports unaccounted for water losses of less than 20 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. Commission staff recommends that notification requirements contained in Commission Regulation §806.15 be waived because of the nature and timing of this modification.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

Decision

1. The project's groundwater withdrawals (30-day averages) of 0.576 mgd from Well 2, 0.576 mgd from Well 3, and 0.360 mgd from ID Park Well 1 are approved pursuant to Article 3, Section 3.10, of the Compact.
2. The instantaneous withdrawal rates for Wells 2, 3, and ID Park Well 1 shall not exceed 400 gpm, 400 gpm, and 250 gpm, respectively.
3. The project's groundwater withdrawal (30-day average) of 0.504 mgd, and the instantaneous pumping rate of 350 gpm, from ID Park Well 2 shall be maintained at the current rates.
4. The total system withdrawal limit of 2.510 mgd shall be maintained at its current rate.
5. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.
6. Conditions 1, 4, 8, and 17 of the existing approval (Docket No. 20070602) are hereby rescinded.
7. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.
8. The project sponsor shall keep daily records of the metered withdrawals from Well 2, Well 3, ID Park Well 1, ID Park Well 2, and the total system withdrawal. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Monitoring

reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

9. The notification requirements specified in Commission Regulation §806.15 are hereby waived.

10. The constant-rate aquifer test requirements specified in Commission Regulation §806.12 for Wells 2, 3, and ID Park Well 1 are hereby waived.

11. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a). The project sponsor shall report its system loss to the Commission annually.

12. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

13. All other conditions in Commission Docket No. 20070602 not inconsistent herewith shall remain effective.

14. This approval is effective until June 13, 2022. The term of this docket modification is in accordance with the term of the prior docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than December 13, 2021, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20070901

Approval Date: September 12, 2007

SOUTH SLOPE DEVELOPMENT CORPORATION– SONG MOUNTAIN SKI RESORT

Surface Water Withdrawal of up to 3.705 mgd (Peak Day)
from an Unnamed Tributary to Crooked Lake, When Available,
Groundwater Withdrawal of 0.960 mgd (30-Day Average) from Well MW-3,
and Consumptive Water Use of up to 0.815 mgd (Peak Day), for Snowmaking,
Town of Preble, Cortland County, New York

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the applications on April 25, 2007.

Description

Purpose. The purpose of the application is to request approval for the withdrawal of surface water and groundwater, and consumptive water use for snowmaking at a ski resort.

Location. The project is located adjacent to the Susquehanna River Basin divide in the Upper Susquehanna River Subbasin, HUC 02050102, Crooked Lake Watershed, Town of Preble, Cortland County, New York.

Project Features. South Slope Development Corporation, the project sponsor, has requested approval for the withdrawal of up to 3.705 million gallons per day (mgd) on a peak day from an unnamed tributary to Crooked Lake and a withdrawal of 0.960 mgd on a 30-day average from Well MW-3. The water will be used for snowmaking at a ski resort, and the project sponsor has also requested approval for the consumptive use of water up to 0.815 mgd. According to the project sponsor, the surface water withdrawal is 1.000 mgd as a 30-day average. The snowmaking season typically runs from mid-November to mid-February.

The project sponsor intends to utilize its surface water withdrawal from the unnamed tributary and storage in its two on-site storage ponds, supplemented by groundwater withdrawals from Well MW-3, to meet its water supply needs. The lower pond (Pond 1), constructed in 1960, is an on-stream storage pond that has a reported holding capacity of 600,000 gallons. An

upper pond (Pond 2), constructed in 2002, is an off-stream storage pond located upgradient from Pond 1, with a reported holding capacity of 2 million gallons (approximately two days of storage at projected snowmaking rates). The surface area of the two ponds was estimated to be 0.5 acre each.

Water used in the resort's snowmaking system can be withdrawn from either Pond 1 or Pond 2. Pond 1 is filled by the flow of an unnamed tributary to Crooked Lake, withdrawals from Well MW-3, and from water stored in Pond 2. Pond 2 receives minimal runoff, with the majority of its water being pumped from Pond 1. Currently, there is metering in place to record the surface water withdrawals.

Well MW-3 was drilled in December 1998 and is 12 inches in diameter and 59 feet deep. The well penetrates glacial outwash sands and gravels, and is cased and screened from approximately 10 to 59 feet below ground surface.

The project sponsor also operates a potable water supply well (Well MW-1) that is 60 feet deep and penetrates glacial outwash sand and gravel. Peak monthly usage for Well MW-1 was previously reported to be 483 gallons per day (gpd).

Although the project was approved as Commission Docket No. 19991103 on November 4, 1999, for a groundwater withdrawal of 0.960 mgd from Well MW-3 and the consumptive use of water up to 0.316 mgd for snowmaking, the approval no longer accurately represents the project features and water use. The project sponsor submitted new applications for its withdrawals and consumptive use, and this docket supersedes the 1999 approval.

Aquifer Test. A 48-hour, constant-rate aquifer test of Well MW-3 was conducted on July 7-9, 1999. The testing plan was reviewed and approved by Commission staff. During the testing, Well MW-3 was pumped at a constant rate of 1,030 gallons per minute (gpm) (1.480 mgd). Water levels were measured in the production well, three wells owned by the resort (including Well MW-2), four nearby residential wells (one constructed in bedrock), and two wetland piezometers. The residential wells are located between 475 feet and 650 feet from the production well. In addition, water level data were collected by the U.S. Geological Survey in Song and Crooked Lakes.

Commission staff recommends that this testing be accepted to satisfy the aquifer testing requirement.

During background monitoring, 1.57 inches of rainfall were recorded in the area and caused groundwater levels to be in a state of recovery (increasing water levels) at the start of the aquifer test. In addition, a total of 0.26 inches of rain fell during the test.

Maximum drawdown observed in Well MW-3 at the end of the constant-rate test was 21.4 feet. Drawdown in the six wells completed in the sand and gravel aquifer ranged from 0.7 to 1.7 feet. In the bedrock well, observed drawdown was 19 feet and was likely the result of the resident's usage.

Pumping over 48 hours did not have a measurable impact on Song Lake. Due to an equipment malfunction, it was not possible to retrieve the data for Crooked Lake. Manual measurements taken from the two piezometers in adjacent wetlands showed no consistent trend in water levels in the wetlands during the pumping test. The northern piezometer showed an increase in water level of 1.3 feet. The southern piezometer showed a decrease in water level of 0.3 feet.

Findings

The project is subject to Commission review, approval standards, and reporting requirements including Commission Regulations §806.21, §806.22, and §806.23.

All water evaporated from Pond 2, as well as 22 percent of the water withdrawn from the unnamed tributary, storage ponds, and Well MW-3, and used for snowmaking, is considered to be used consumptively. The daily quantity of water consumptively used shall be 22 percent of the daily quantity withdrawn for the snowmaking system, plus the daily quantity of water evaporated from Pond 2.

The snowmaking system is equipped with a meter that measures the quantity of water pumped through the snowmaking system. Commission staff recommends that the meter be certified and maintained to ± 5 percent accuracy, and that the metered quantity be recorded on a daily basis. Water evaporated from Pond 2 will be calculated by the project sponsor employing a methodology acceptable to the Commission.

Should the proposed accounting procedure fail to accurately measure the project's consumptive water use, the Commission reserves the right to modify the metering, monitoring, and accounting procedures. Commission staff will provide the project sponsor with written notice of any required change in the metering, monitoring, and accounting procedures. Any alternative monitoring or accounting procedure requested by the project sponsor should be reviewed and approved by Commission staff.

The project sponsor has calculated the project's pre-Compact consumptive water use for snowmaking at 0.071 mgd. Commission staff concurs with the project sponsor's calculation of the pre-1971 snowmaking consumptive water use. For purposes of this docket, this quantity of consumptive water use for snowmaking is considered "grandfathered" and is exempt from consumptive use mitigation requirements.

The project's consumptive use of water for snowmaking, in excess of the grandfathered quantity, is subject to consumptive use mitigation requirements, as per Commission Regulation §806.22. To satisfy these requirements, the project sponsor proposes to provide monetary payments to the Commission quarterly. The payment will be based on 22 percent of the daily quantity of water used for snowmaking, minus the pre-1971 snowmaking consumptive use of 0.071 mgd, plus the evaporative loss from the 0.5-acre surface area of Pond 2. If the daily grandfathered quantity exceeds the project's calculated daily consumptive water use, that day's payable consumptive water use is considered to be zero.

The project sponsor has requested a consumptive water use approval of up to 0.815 mgd. Based on an analysis of water use records supplied by the project sponsor and the future plans of the ski resort, Commission staff is recommending approval of the requested amount. Should the project's future consumptive water use be expected to exceed 0.815 mgd, the project sponsor must apply for a modification to this docket.

The project sponsor operates a surface water intake on Pond 1. The project sponsor has requested a withdrawal of up to 3.705 mgd, at a maximum instantaneous pumping rate of 2,573 gpm. Commission staff is recommending approval of the requested quantity and rate. Meters should be installed on the surface water intake, in accordance with Commission Regulation §806.30, and the project sponsor should keep daily records of its withdrawal. The project sponsor should also meter water pumped to Pond 2. These data should be reported quarterly.

Commission staff has calculated the 7-day, 10-year low flow (Q7-10) for the unnamed tributary to Crooked Lake to be 0.0165 cubic feet per second (cfs) (7.4 gpm), and the average daily flow to be 1.744 cfs (783 gpm). The proposed rate of withdrawal (2,573 gpm) is greater than 10 percent of the Q7-10 flow for stream, thereby requiring a passby flow to protect aquatic resources and downstream uses.

The unnamed stream is classified as C waters (New York State Title 6 Environmental Conservation, Chapter X, Subchapter B, Fresh and Tidal Salt Waters). Based on the stream's geographic location in the watershed, the glacial setting, and the anticipated associated fishery and combined species of fish, Commission staff has determined a minimum flow of 25 percent of the annual average daily flow, or 0.436 cfs (196 gpm), is required below the dam to prevent loss of aquatic habitat and adverse impact to downstream water users. Commission staff recommends that the project sponsor install a passive system that will allow a continuous, minimum passby flow of 196 gpm at all times.

Because the project sponsor is using an on-stream pond as its source of water, the passby criteria may be modified to accommodate conditions when natural streamflow is less than 196 gpm if the project sponsor does not make a continuous release. Commission staff recommends that the project sponsor submit a plan for staff review and approval to allow a downstream release of water from Pond 1 of 196 gpm, or an amount equal to the inflow from the unnamed tributary to the pond when streamflow is less than 196 gpm.

Commission staff further recommends that the project sponsor submit its proposed monitoring plan, and its design and a proposed construction schedule for the passby flow and inflow measuring devices, within 60 days following Commission action for review and approval by Commission staff prior to any construction.

The project sponsor also requested a groundwater withdrawal of 0.960 mgd (30-day average) from Well MW-3. As part of this application, the project sponsor submitted results from an aquifer test conducted in 1999. Commission staff has reviewed the water availability, hydrogeologic setting, and the aquifer test data and recommends that the Commission accept this testing to satisfy the aquifer testing requirement.

Results from the aquifer test indicated that Well MW-3 taps a highly transmissive unconfined aquifer in the Homer-Preble valley-fill. The geology and hydrogeology in this area are complex because of the variety of glacial features, unconsolidated deposits, and kettle lakes. The sand and gravel aquifer tapped by the production well is of limited extent and variable thickness, bounded by the bedrock valley wall to the west, fine-grained (and low permeability) sediments on the eastern side of the valley, Crooked Lake to the north, and Song Lake to the south. The production well is located approximately 800 feet from the bedrock valley wall and approximately 1,000 feet from Song Lake.

Numerous private domestic wells tap this aquifer for their potable water supply. Data indicate that the aquifer thins in the direction of the valley wall. The residential wells are commonly shallow, from 40 to 60 feet deep, if drilled. Along the shore of Song Lake, many homes have driven wells with total depths of 25 feet or less.

Two of the closest domestic wells are located in the sand and gravel aquifer near the bedrock valley wall, 500 and 600 feet, respectively, from the production well. These wells were previously identified as the most sensitive domestic wells to drawdown impacts. The wells are 50 feet deep, with pumps set approximately 3 feet from the bottom of the wells. Depth to static water level was approximately 36 feet at the time of the aquifer testing.

During the pumping test, the maximum drawdown in Well MW-3 was approximately 21 feet. Drawdowns on the order of 2 feet occurred within the sand and gravel aquifer in an area within approximately 300 feet of the production well. Analysis of the test data indicated a barrier boundary (the valley wall) was encountered during the 48-hour test. In Commission staff's opinion, a recharge boundary or boundaries (from the lakes) would have been observed if the pumping test had continued longer. Thus, under average conditions, adverse impacts to nearby wells are not anticipated.

However, during the severe fall-winter drought of 1998, water levels in Song Lake were about 1 foot lower than in July. Limited data concerning the operation of the well under drought conditions indicate that there is some potential for adverse impacts to sensitive wells, particularly the wells at the western boundary of the sand and gravel aquifer. Deepening cannot mitigate any loss of these wells.

The aquifer test data indicated a potential for well interference between Well MW-3 and nearby domestic wells during drought conditions. However, because these wells did not experience problems during the controlled pumping test, and because the well is a supplemental source that will be pumped seasonally, Commission staff recommends additional monitoring to document any interference effects between these wells and the production well before additional operating conditions are imposed on the project. Monitoring during operation of the well is preferred over a second pumping test because of the nature of the withdrawal and the complex hydrogeology of the area.

Commission staff recommends that the project sponsor conduct monitoring during the first three years of operation of Well MW-3. The project sponsor should prepare a monitoring plan and submit it to Commission staff for review and approval. At a minimum, the plan should include the following: the continuous monitoring of water levels in Wells MW-3 and MW-2, continuous water level measurements in the closest residential well or an approved monitoring

well east of Song Lake Road, and weekly water level measurements during the snowmaking season and monthly during the non-pumping period in residential wells to the north, south and east of Well MW-3. The wells should be selected to be the most sensitive to potential adverse impacts from drawdown.

The nearby bedrock residential well showed no impact that could be related to pumping and staff concludes that no substantial adverse impacts to bedrock wells are expected from pumping Well MW-3. No adverse impacts to other area groundwater withdrawals are anticipated.

The groundwater monitoring data should be provided to the Commission in an interpretive report annually and as requested by Commission staff. Should the monitoring data prove to be inconclusive with respect to interference, the Commission reserves the right to require additional monitoring as necessary.

Commission staff recommends approval of the requested withdrawal of 0.960 mgd (30-day average) and a maximum instantaneous rate of withdrawal not to exceed 1,000 gpm. The project sponsor should meter the daily quantity of water withdrawn from Well MW-3.

The project is subject to water conservation requirements as per Commission Regulation §806.25(b).

The project sponsor has requested to pay the application fee in installments pursuant to Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The first installment has been paid. The remaining two installments shall be paid in full no later than September 12, 2008 and September 12, 2009, respectively. The project sponsor has provided all proofs of notification; however, notice was not provided within the 10 days specified by Commission Regulation §806.15. Commission staff recommends that this requirement be waived.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

1. The project's surface water withdrawal from an unnamed tributary to Crooked Lake of up to 3.705 mgd, when available, groundwater withdrawal of 0.960 mgd (30-day average) from Well MW-3, and the consumptive use of water of up to 0.815 mgd are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including monitoring and reporting requirements contained in Commission Regulation §806.30.

4. Commission Docket No. 19991103, approved November 4, 1999, is hereby rescinded.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install and then maintain a meter, accurate to within five (5) percent, on the snowmaking system to measure the quantity of water withdrawn from Ponds 1 and 2 to the snowmaking system. The project sponsor shall notify the Commission, in writing, when the meter is installed and certify the accuracy of the measuring device to within five (5) percent of actual flow.

6. The project sponsor shall keep daily records of the project's consumptive water use, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity evaporated from Pond 2, plus 22 percent of the water pumped to the snowmaking system. Commission staff shall review and approve the method of calculation of evaporative loss from the pond.

7. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering on withdrawals from Pond 1 as they are transferred to the snowmaking system, accurate to within five (5) percent, and keep daily records of the project's surface water withdrawal. The project sponsor also shall install and maintain metering on its line to Pond 2, accurate to within five (5) percent, and keep daily records of the project's pumping to Pond 2. The project sponsor shall notify the Commission, in writing, when the meters are installed. The project sponsor shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The project sponsor may propose alternative monitoring to the Commission for staff review and approval. The daily amount of surface water withdrawal shall be the quantity of water pumped from Pond 1 to the snowmaking system, plus the quantity of water pumped to Pond 2, minus the quantity of water withdrawn from Well MW-3.

8. Within sixty (60) days from the date of this approval, the project sponsor shall install and maintain metering accurate to within five (5) percent on the withdrawal from Well MW-3. The project sponsor shall keep daily records of the metered withdrawal and, except as described in Condition 12, daily water levels in Well MW-3. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

9. The maximum instantaneous rate of production from Well MW-3 shall not exceed 1,000 gpm.

10. The project sponsor shall maintain a continuous downstream release of water from Pond 1 of 0.436 cfs (196 gpm) or, as an alternative, the project sponsor shall submit a plan for review and approval to release an amount equal to the total inflow of the stream to the pond when streamflow into the pond is less than 196 gpm. The project sponsor shall keep daily records of the outflow of the pond and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted to Commission staff and are due within thirty (30) days after the close of the preceding quarter.

11. The project sponsor shall submit its design and a proposed construction schedule for the flow measurement devices within sixty (60) days of the date of this approval for review and approval by Commission staff prior to any construction. Following approval, the project sponsor shall complete construction in accordance with the approved schedule and shall certify to the Commission that construction has been completed in accordance with the approved design. The passby system shall be kept fully functional and free of debris.

12. The project sponsor shall continuously monitor water levels in Well MW-3 the first three (3) years of operation, at a minimum, and through at least one dry period. The project sponsor shall provide the monitoring record to the Commission quarterly and as otherwise requested.

13. At least sixty (60) days prior to the operation of Well MW-3, the project sponsor shall submit a plan describing its proposed monitoring for review and approval by Commission staff. The monitoring shall be conducted during the first three (3) years of operation of Well MW-3. All monitoring points shall be reviewed for suitability and approved by Commission staff. Monitoring the residential wells is subject to the permission of the homeowners. The project sponsor shall provide the results to the Commission annually and as otherwise requested. Should the monitoring data prove to be inconclusive with respect to interference, the Commission reserves the right to require additional monitoring as necessary.

14. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity evaporated from Pond 2, plus 22 percent of the water pumped to the snowmaking system. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project, less the grandfathered quantity of 0.071 mgd. If the daily grandfathered quantity exceeds the project's daily consumptive water use, that day's consumptive water use is considered to be zero. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

15. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

16. The project sponsor may pay the application fee in installments, pursuant to Commission Regulation §806.13 and in accordance with Commission Resolution No. 2006-08. The project sponsor has paid one annual installment and shall be invoiced for the balance over the next two (2) years.

17. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

18. The notification requirements specified in Commission Regulation §806.15 are hereby waived.

19. If the Commission determines that the operation of the project's groundwater withdrawal from Well MW-3 adversely affects any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

20. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

21. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

22. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

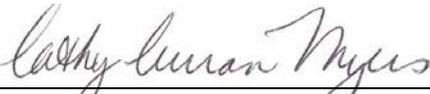
23. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

24. This approval is effective until September 12, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 12, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

25. If the project is discontinued for such a period of time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007


 Cathleen C. Myers, Chair
 Pennsylvania Commissioner



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Docket No. 20070902

Approval Date: September 12, 2007

AES WESTOVER, LLC– AES WESTOVER GENERATING STATION

Surface Water Withdrawal of up to 97.300 mgd from the Susquehanna River,
and Consumptive Water Use of up to 1.748 mgd (Peak Day),
for Electric Power Generation,
Town of Union and Village of Johnson City, Broome County, New York

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the consumptive water use and surface water withdrawal applications on February 20, 2007, and additional information on March 2, 2007 and August 24, 2007.

Description

Purpose. The purpose of the application is to request approval for consumptive water use and surface water withdrawal for processes related to operations at the AES Westover Generating Station (AES Westover).

Location. The project is located in the Upper Susquehanna Subbasin, HUC 02050103, within portions of the Town of Union and the Village of Johnson City, Broome County, New York.

Project Features. AES Westover, LLC, the project sponsor, has requested approval for consumptive water use of up to 1.748 million gallons per day (mgd) on a peak day, of which up to 0.130 mgd will be new consumptive use related to the planned installation of a multi-pollutant control system, including a flue gas desulphurization (FGD) system. The project sponsor also has requested approval for its current surface water withdrawal of up to 97.300 mgd (peak day) from the Susquehanna River. The present rate of withdrawal is not expected to increase.

AES Westover provides power to the New York State Electric and Gas Corporation's regional transmission system, operated by the New York Independent Systems Operator (NYISO). The project consists of three coal-fired boilers (Boilers 11, 12, and 13) that supply two steam electric generating units, designated as Units 7 and 8. Unit 7 began operation in 1943,

and Unit 8 began operation in 1951. Each unit has an open-cycle (once-through) cooling system, and condenser cooling water and process makeup water are withdrawn from the Susquehanna River through two parallel tunnels. The total maximum water withdrawal from the river is approximately 97.250 mgd, and is limited by the capacity of the existing cooling water supply pumps. The water is used for cooling spent steam in the condensers of the two units' cooling systems, and the cooling water is returned to the Susquehanna River via its tributary, Little Choconut Creek, under authorization in New York State Pollutant Elimination System Permit No. NY-0003875. The project sponsor describes the discharge water as essentially undiminished in quantity and quality, except for the elevated temperature. A small portion of the water withdrawn from the river is used for miscellaneous plant purposes, such as ash processing.

Currently, consumptive water losses at AES Westover result from instream evaporation induced by thermal loading from the cooling water discharged to the river, evaporative loss from Units 7 and 8, water loss in ash, and export steam loss. Consumptive use related to ancillary plant operation is 0.068 mgd (peak day). The nominal maximum heat rejection rate is 805 million Btu per hour. The project sponsor estimated the current rate of instream evaporation to be 1.100 mgd as a maximum 30-day average, assuming 80 percent capacity factor for plant operation. The computed maximum day consumptive use related to evaporative loss due to power plant cooling is 1.550 mgd, assuming a 100 percent capacity factor.

Pursuant to a Consent Decree with the New York State Department of Environmental Conservation (NYSDEC), the project sponsor intends to install the multi-pollutant control system to reduce air emissions. The multi-pollutant control system will include an FGD system for the removal of sulfur dioxide emissions at Unit 8 (i.e., Boiler 13). These improvements will increase consumptive water use at the facility on a peak day by 0.130 mgd. The project sponsor plans a gradual phaseout of operations for Unit 7 and its boilers (Units 11 and 12).

The FGD system will be installed after Unit 8's existing air heater. The project sponsor indicates that the system will include a circulating dry scrubber vessel, absorbent injection of hydrated lime, a water storage tank/water injection system, product recycle injection, and a flue gas recycle system. Hydrated lime, prepared using 6 to 15 gallons per minute (gpm) of water, will be injected with an additional 60 to 75 gpm of water into the circulating dry scrubber vessel to lower the temperature of the exhaust gas and to increase the effectiveness of sulfur dioxide removal. Therefore, total process makeup requirements for the FGD system are up to 90 gpm (0.130 mgd). Water for the FGD system will be taken and recycled from the existing equipment cooling operations.

Findings

The project is subject to Commission approval, monitoring, and reporting requirements, as per Commission Regulations §806.4(a)(1)(iii), §806.22, and §806.23.

Although the project predates the Commission's consumptive water use and surface water withdrawal regulations, the project identified that its proposed addition of a multi-pollutant control system, including a FGD system, will sufficiently increase consumptive water use to be subject to Commission Regulation §806.4, relating to consumptive use and withdrawal projects requiring review. The project sponsor has requested approval for consumptive water use of up to

1.748 mgd (peak day) and a surface water withdrawal of up to 97.300 mgd (peak day) from the Susquehanna River.

All water evaporated or otherwise lost from the cooling system or other power generation processes, incorporated into waste (ash) or other products, FGD systems, and evaporated off the river surface due to thermal loading is considered to be a consumptive water use subject to Commission regulation.

Commission staff recommends approval of the requested quantity of consumptive water use, 1.748 mgd on a peak day. The project sponsor should submit a plan to quantify the daily consumptive water use associated with operation of the plant and the thermal loading, and the project's total surface water withdrawal from the Susquehanna River for review and approval by Commission staff. The plan should contain metering that is accurate to within 5 percent, or other suitable methods of measurement, on the water diverted to the facility, on the wastewater and thermal discharges, and other locations, as appropriate, and on the total water withdrawal from the Susquehanna River. The project sponsor should report the daily consumptive water use and surface water withdrawal data to the Commission quarterly.

Should the proposed accounting procedure fail to measure AES Westover's total water withdrawal and consumptive use of water, the Commission reserves the right to modify the measuring, monitoring, and accounting procedures. Commission staff will provide the project sponsor with prior written notice of any required change in the measuring, monitoring, and accounting procedures. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor must be reviewed and approved by Commission staff.

Commission staff finds that consumptive water loss due to evaporation from the water surface associated with the facility's thermal discharge cannot be measured or metered directly. As such, this component of the facility's consumptive water use must be determined through indirect measurement and analytical procedures. The project sponsor has calculated the actual pre-Compact consumptive water to be 1.168 mgd, based on Commission staff's guidance regarding pre-Compact use as defined in Regulation §806.3 as "the maximum average daily quantity or volume of water consumptively used over any consecutive 30-day period prior to January 23, 1971." Commission staff concurs with this calculation of pre-Compact consumptive water use. For purposes of this docket, this quantity of consumptive water use is considered "grandfathered" and is exempt from water mitigation requirements.

Should the approved methodology for estimating future consumptive water use associated with the thermal component of the facility's discharge differ from the project sponsor's methodology used as a basis for the preparation of this docket, Commission staff recommends that the docket's pre-Compact consumptive water use be adjusted accordingly (i.e., the pre-Compact consumptive water use in the docket should be updated to reflect the same assumptions and analytical procedures approved for use in estimating future evaporative loss from the water surface associated with the facility's thermal discharge).

The project's consumptive use of water in excess of its grandfathered quantity is subject to water mitigation requirements, as per Commission Regulation §806.22(b). To satisfy these requirements, the project sponsor proposes to provide monetary payments to the Commission for its actual consumptive water use.

The existing surface water withdrawal predates the effective date of Commission Regulation §806.4; however, the project sponsor's increase in consumptive water use triggers Commission review and approval of the surface water withdrawal.

Commission staff recommends approval of the requested surface water withdrawal of up to 97.300 mgd (peak day), as submitted by the project sponsor. Based on the U.S. Geological Survey's stream gaging station on the Susquehanna River at Waverly, New York, the 7-day, 10-year low flow (Q7-10) rate at the project location is approximately 217.000 mgd. The withdrawal exceeds 10 percent of the Q7-10 low flow, but Commission staff finds that a passby flow is not required because of mitigation from the return flow immediately downstream from the facility. As described previously, the project sponsor should submit a plan to quantify the daily total surface water withdrawal from the Susquehanna River for review and approval by Commission staff. The plan should contain metering that is accurate to within 5 percent, or other suitable methods of measurement, on the water diverted to the facility. The project sponsor should report the daily surface water withdrawal to the Commission quarterly.

The project sponsor has chosen to pay the application fee in three consecutive equal installments, in accordance with Commission Regulation §806.16, and in accordance with Commission Resolution No. 2006-08. The project sponsor has paid the appropriate fee for the Year 1 installment. The project also has requested a waiver of Years' 2 and 3 installment payments.

Although the withdrawal and up to 1.168 mgd of consumptive use related to once-through cooling were previously exempt from review, the increased consumptive use properly triggered Commission review. Commission staff used its standard procedures during review for potential adverse impacts from the existing operations and in the context of the increased consumptive use. Furthermore, standard compliance monitoring will be conducted for the term of this docket. Commission staff, therefore, recommends applying standard fees for the review and, thus, denial of this request for waiving Years' 2 and 3 installment payments.

The project sponsor has provided all proofs of notification, as required by Commission Regulation §803.25.

No adverse impacts to other area surface water withdrawals are anticipated. The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

1. The project's surface water withdrawal from the Susquehanna River of up to 97.300 mgd, and the project's consumptive use of water up to 1.748 mgd, are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including monitoring and reporting requirements, as per Commission Regulation §806.30.

4. Within sixty (60) days from the date of this approval, the project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff that accounts for all water withdrawn from the river, the wastewater and thermal discharge, and the total consumptive water use at the facility. Following approval, the project sponsor shall execute the plan and complete any installation of meters or other means of measuring surface water withdrawals in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, when the meters are installed and certify the accuracy of the measuring devices to within five (5) percent of actual flow. The project sponsor shall notify the Commission when the monitoring plan has been implemented.

5. The project sponsor shall keep daily records of the project's consumptive water use and surface water withdrawal, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity evaporated or otherwise lost from the cooling system or other power generation processes, incorporated into waste (ash) or other products, FGD systems, and evaporated off the river surface due to thermal loading.

6. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity evaporated or otherwise lost from the cooling system or other power generation processes, incorporated into waste (ash) or other products, FGD systems, and evaporated off the river surface due to thermal loading. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project, less the grandfathered quantity of 1.168 mgd. If the daily grandfathered quantity exceeds the project's daily consumptive water use, that day's consumptive water use is considered to be zero. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

7. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

8. The project sponsor may pay the application fee in installments, pursuant to Commission Regulation §806.13 and in accordance with Commission Resolution No. 2006-08. The project sponsor has paid one annual installment and shall pay the balance over the next two (2) years.

9. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

10. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

11. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

12. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

13. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

14. This approval is effective until September 12, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 12, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

15. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

Exhibit A4

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

Phone (717) 238-0423 • Fax (717) 238-2436

Web <http://www.srbc.net>

Docket No. 20070903

Approval Date: September 12, 2007

TOWN OF COHOCTON – NORTH COHOCTON WATER DISTRICT

Groundwater Withdrawal (30-Day Average) of 0.072 mgd from Well 3,
and a Total System Withdrawal Limit (30-Day Average) of 0.150 mgd,
for Public Water Supply,
Town of Cohocton, Steuben County, New York

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on February 15, 2007, and additional information on July 18 and August 14, 2007.

Description

Purpose. The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

Location. The project is located in the Chemung River Subbasin, HUC 02050101, Cohocton River Watershed, Town of Cohocton, Steuben County, New York.

Project Features. The project sponsor has requested approval for withdrawal (30-day average) of 0.072 million gallons per day (mgd) from Well 3. Well 3 will be used as a second source of water for the public water supply system that currently relies on Well 2. A groundwater withdrawal of 0.150 mgd (30-day average) was previously approved for Well 2 in Commission Docket No. 19990703, dated July 8, 1999. The Commission also approved a total system withdrawal limit of 0.150 mgd from Wells 1 and 2 in that docket. The project sponsor intends to decommission and replace Well 1, the existing backup supply for the public water system, with Well 3.

Specific location information concerning discrete water-related project features has been withheld for security reasons. Well 3 is located 471 feet from Well 2, and both are screened in gravel and sand glacial outwash deposits adjacent to the Cohocton River. Well 3 was constructed with an 8-inch-diameter, steel screen from a depth of 47 to 51 feet below ground surface (bgs). Eight-inch-diameter, solid steel casing is grouted in place from the ground surface

to 47 feet bgs. The project sponsor reported a pump capacity of 177 gallons per minute (gpm) for Well 3.

The public water supply system has an existing average daily demand of 0.033 mgd, and an existing maximum daily demand of 0.066 mgd. The average and maximum daily demands are projected to grow to 0.072 and 0.144 mgd, respectively, by 2026.

Aquifer Test. A 72-hour, constant-rate aquifer test of Well 3 was conducted on May 22-25, 2006, with pre-approval by Commission staff. A separate stepped-rate pumping test of Well 3 was performed prior to the constant-rate aquifer test. Well 3 was pumped at a rate of 265 gpm and Well 2 was pumped intermittently at a rate of 225 gpm. During the aquifer test, groundwater levels were continuously monitored in Well 3 and in five observation wells located within 600 feet of Well 3, and four drive points in wetland areas. The groundwater levels were measured in Well 2 using a hand-held probe.

The total drawdown in the pumping well (Well 3) at the end of the aquifer test was 3.93 feet. Measurable drawdown was observed in the northern and western wetland monitoring points (approximately 0.3 feet and 0.4 feet, respectively). However, some of the wetlands monitoring data collected during the test are considered invalid because a rain event flooded the western wetland area at the beginning of the test. The rainfall did not have a measurable impact on the data collected in the monitoring wells.

Coordination. Commission staff has coordinated with the New York State Department of Environmental Conservation (NYSDEC) Region 8 Office during review of this project. The project sponsor submitted an application for public water supply for Well 3 to NYSDEC. In addition, the New York State Department of Health (NYSDOH) approved the plans and specifications for Well 3 on January 22, 2007; however, the well may not be placed into operation until a Completed Works Approval certificate is issued by NYSDOH. NYSDEC staff has reviewed this docket for consistency with its requirements.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §806.4, §806.21, §806.23, and §806.30.

Commission staff reviewed the groundwater availability analysis, aquifer test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff recommends approval of a 30-day average withdrawal of 0.072 mgd from Well 3, and a total system 30-day average withdrawal of 0.150 mgd. Commission staff recommends approval of a peak instantaneous pumping rate of 177 gpm for Well 3.

Measurable drawdown was observed during the aquifer test in wetlands north and west of Well 3. Commission staff finds that at the reduced pumping rate, pumping at Well 3 is anticipated to have a de minimis impact.

The project is subject to the Commission's water conservation requirements contained in Commission Regulation §806.25(a). The water system is metered, except for municipal uses,

and the Town of Cohocton reports unaccounted for water losses of less than 20 percent, which is in compliance with Commission Regulation §806.25(a)(1).

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

Decision

1. The project's groundwater withdrawal of 0.072 mgd (30-day average) from Well 3 and a total system withdrawal limit of 0.150 mgd (30-day average) are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals from Well 3 and the total groundwater withdrawal. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install a meter, accurate to within five (5) percent, on Well 3. The project sponsor shall notify the Commission, in writing, when the meter is installed.

6. The maximum instantaneous rate of production from Well 3 shall not exceed 177 gpm.

7. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a). The project sponsor shall report its system loss to the Commission annually.

8. If the Commission determines that the operation of the project's groundwater withdrawal from Well 3 adversely affects any existing groundwater or surface water withdrawal,

the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

9. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

10. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

11. This approval does not become effective until the project sponsor certifies to the Commission that it has received permits from NYSDEC and NYSDOH for use of Well 3.

12. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

13. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

14. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

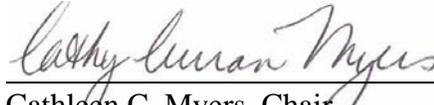
15. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

16. This approval is effective until September 12, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 12, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

17. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

Exhibit A5

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Web <http://www.srbc.net>

Docket No. 20040904-2

Approval Date: September 8, 2004

Modification Date: December 14, 2005

Modification Date: September 12, 2007

NORTHAMPTON FUEL SUPPLY COMPANY, INC.– LOOMIS BANK OPERATION

Consumptive Water Use of up to 0.185 mgd,
for Surface Mining of Coal Refuse Material,
Hanover Township, Luzerne County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the request from the project sponsor for corrective modification in July 2007.

Description

Purpose. The purpose of the modification is to revise the protocol for calculating consumptive water use associated with the surface mining of coal refuse material. The Commission originally approved the consumptive water use of up to 0.050 million gallons per day (mgd) of water on September 8, 2004, as Docket No. 20040904 (docket), subject to conditions enumerated in the docket. The docket was modified on December 14, 2005, to recommend an increase in consumptive water use of up to 0.185 mgd. The methodology for calculating the consumptive water use specified in that modification will become obsolete in 2008. Commission staff agrees that the condition should be revised using the more general terms as in the original docket approval. No changes in the quantity of consumptive water use are requested or recommended.

This docket modification revises the method of calculating the consumptive water use and changes certain provisions contained within the docket in accordance with recent modifications of Commission regulations.

Coordination. Commission staff coordinated with the Pennsylvania Department of Environmental Protection (PADEP), Bureau of District Mining Operations, during the previous

review of the project. PADEP staff has reviewed the docket and the 2005 modification for consistency with its existing Surface Mining Permit No. 40940205.

Findings

The project's consumptive water use specified in the docket is for a peak day of up to 0.185 mgd for dust control, and the separation and processing of coal from coal refuse material using a heavy media plant. The project sponsor obtains water from an underground mine pool that is pumped to either the heavy media plant or into water trucks for dust control on haul roads. The wastewater and fine slurry from the screening operation is re-injected into the mine pool.

The total quantity of water pumped to the screening plant, minus the quantity of water returned to the mine from the screening plant (density compensated), is consumptively lost either through evaporation or retention in the coal or waste product at the screening plant. Commission staff recommends that the project sponsor install meters to measure the daily quantity of water entering and leaving the screening plant system. The project sponsor could propose an alternative to metering for Commission staff's review and approval.

Commission staff recommends that the daily quantity of water used for dust control on haul roads be calculated based on the capacity of the water trucks and the number of truckloads of water. The project sponsor will maintain a log of the daily number of truckloads of water withdrawn.

Commission staff recommends that all other conditions in Commission Docket Nos. 20040904 and 20040904-1 that are not inconsistent with this docket action should remain effective.

Commission staff recommends that an application fee be waived for this corrective modification. Commission staff recommends that the notification requirements be waived due to the nature of the modification.

Based on Commission Regulation §803.30(a), the prior docket approval is effective until September 8, 2029. Commission staff recommends the term of this docket modification be consistent with that of the prior docket approval. The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

1. Commission Docket No. 20040904, as approved September 8, 2004, and modified on December 14, 2005, is hereby modified to approve revised methodology for calculating the quantity of consumptive water use, pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. Condition 4 of the existing approval, as modified, is hereby rescinded.
4. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.
5. Within sixty (60) days from the date of this approval, the project sponsor shall install and then maintain a meter(s), accurate to within five (5) percent, to measure the daily quantity of water entering and leaving the screening operation. The project sponsor may propose alternative accounting procedures to the Commission for staff review and approval.
6. The project sponsor shall keep daily records of the project's consumptive water use, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity of water used in coal screening operations and retained in the screened materials and waste products, and used for dust control. The Commission reserves the right to inspect all measurement equipment and audit all measurement records.
7. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the quantity of water used in coal screening operations and retained in the screened materials and waste products, and used for dust control. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.
8. The application fee requirement specified in Commission Regulation §806.35 is hereby waived for this corrective modification.
9. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.
10. The notification requirements specified in Commission Regulation §806.15(a) are hereby waived.
11. To satisfy the Commission's registration requirement, the docket holder shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

12. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

13. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulations §808.

14. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

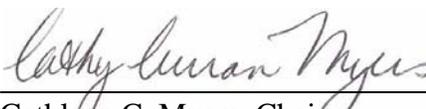
15. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

16. All other conditions in Commission Docket No. Nos. 20040904 and 20040904-1, not inconsistent herewith shall remain effective.

17. This approval is effective until September 8, 2029. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 8, 2029, the existing approval shall be deemed extended until such time as the Commission renders a decision on the application.

By the Commission:

Dated: September 12, 2007


 Cathleen C. Myers, Chair
 Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 19950301-1

Approval Date: March 9, 1995

Modification Date: September 12, 2007

PPL SUSQUEHANNA, LLC– SUSQUEHANNA STEAM ELECTRIC STATION

Surface Water Withdrawal of up to 66.000 mgd (Peak Day) from the Susquehanna River,
Groundwater Withdrawal of 0.125 mgd (30-Day Average) from Wells TW-1 and TW-2,
and Consumptive Water Use of up to 48.000 mgd (Peak Day),
for Power Plant Operation,
Salem Township, Luzerne County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the applications for consumptive use of water and surface water withdrawal on December 20, 2006, and for groundwater withdrawal on August 9, 2007.

Description

Purpose. The purpose of the applications is to request an increase in consumptive water use and approval of surface water and groundwater withdrawals for processes related to an increase in power production and continued operations at the Susquehanna Steam Electric Station (SSES).

Location. The project is located in the Middle Susquehanna Subbasin, HUC 02050107, Salem Township, Luzerne County, Pennsylvania.

Background. The SSES is currently approved by the Commission to consumptively use water (Commission Docket No. 19950301, dated March 9, 1995, [Docket]). That approval incorporates the terms of all related Commission resolutions adopted prior to the approval of the Docket, including Commission Resolution Nos. 82-5, 83-1, 89-12, 90-02, and 91-2. Resolution No. 82-5, effective February 11, 1982, deemed that release of water stored in the Cowanesque Reservoir presents an acceptable manner of mitigation for consumptive use. Resolution No. 83-1, effective January 13, 1983, temporarily certified the project sponsor, PPL Susquehanna, LLC (PPL), to be in compliance with the Commission's consumptive use regulation at the SSES. PPL entered into an agreement, effective June 30, 1986, to participate in

the development of water storage at the Cowanesque Reservoir for the purpose of securing consumptive use mitigation. The operations and release plan from Cowanesque Reservoir was adopted by Resolution No. 89-12, effective September 21, 1989. Under the terms of Resolution No. 90-02, adopted by the Commission on January 18, 1990, the consumptive water use mitigation provided by the SSES through releases at the Cowanesque Reservoir was determined to satisfy the Commission's mitigation requirement for the existing operation. Resolution No. 91-2, effective May 9, 1991, imposed recordkeeping and reporting requirements on the SSES.

The project sponsor participated in the reallocation of storage in the Cowanesque Lake project and, through an agreement with the Commission, sponsored a total of 16,061 acre-feet of storage at the Cowanesque Lake project. Of this amount, 3,000 acre-feet of storage was subsequently dedicated to the Montour Steam Electric Generating Station, and the remaining 13,061 acre-feet is available to the SSES to mitigate consumptive losses during low flow periods.

PPL applied to and received approval from the U.S. Nuclear Regulatory Commission (NRC) to uprate Unit 2 in 1994 ("stretch" uprate) and to similarly uprate Unit 1 in 1995. The Docket, dated March 9, 1995, approved the corresponding increase in consumptive water use (approximately 3.1 percent) associated with these power uprates and determined that water storage in Cowanesque Reservoir allocated to the SSES (13,061 acre-feet) was sufficient to mitigate for consumptive losses of 40.000 million gallons per day (mgd) (on a 30-day average) during low flow periods. At that time, the Commission determined that the increase accounted for all of the water storage at Cowanesque Reservoir that was available for mitigation at the SSES.

PPL applied to and received approval from the NRC to uprate Units 1 and 2 again in 2001 ("measurement uncertainty recapture" uprate). No similar application was made to the Commission at that time.

In October 2006, PPL submitted an application to the NRC for approval of an Extended Power Uprate (EPU) that will increase the thermal power level of the units. Presently, Unit 1 and Unit 2 are each approved for 3,489 megawatts (MW) thermal (t) power. The EPU, if approved, will increase the limit for each unit to 3,952 MWt (approximately a 13.3 percent increase). The increased thermal power will result in an increase in peak and average consumptive water use and surface water withdrawal, and prompted the pending applications.

Project Features. PPL has requested continued approval for consumptive water use of up to 48.000 mgd on a peak day, and elimination of the 30-day average consumptive use limitation of up to 40.000 mgd. The project sponsor also has requested approval for a surface water withdrawal of up to 66.000 mgd (peak day) from the Susquehanna River, and approval for a total groundwater withdrawal of 0.125 mgd (30-day average) from Wells TW-1 and TW-2. The withdrawals and consumptive water will support the operation of the facility as it will be modified by the EPU.

Specific locational information concerning discrete water-related project features has been withheld for security reasons.

The project consists of two nuclear-powered base-load steam electric generating units, known as Unit 1 and Unit 2. Units 1 and 2 began commercial operation in 1983 and 1985, respectively, and each unit has a closed-cycle cooling system with an evaporative cooling tower. The SSES has a spray pond, common to both units, which provides supplemental cooling. Consumptive water losses at the SSES result from evaporation and drift losses at the cooling towers and similar losses from the spray pond.

Surface water withdrawals at the SSES result from pumping Susquehanna River water from a cooling water intake structure to supply makeup water to the cooling tower basins and the spray pond, and to supply raw water to a water treatment system. The withdrawals are used to make up for consumptive water losses and for water discharged back to the Susquehanna River in conjunction with non-consumptive usage as necessary to maintain adequate water levels and quantity for facility operation.

The river intake structure includes flow meters to measure the withdrawal. However, in 2001, the SSES reported that the measurement was inaccurate due mainly to corrosion and fouling of the carbon steel intake pipes which interfered with the operation of the sonic flow meters. Commission staff subsequently reviewed and approved a procedure for use of cooling tower performance diagrams as an alternative to direct measurement to account for consumptive water use.

Groundwater withdrawals to supply sanitary water for the facility, to produce demineralized water, to maintain pump seals, and for miscellaneous process uses at the SSES result from pumping water from two on-site wells, Wells TW-1 and TW-2 (the primary well). The two well system was designed to provide for a mechanical backup should one well become unavailable and, as such, the wells cannot be operated simultaneously and are not separately metered. The 8-inch-diameter wells were drilled in 1974 to depths of approximately 75 feet. The site is underlain by the Devonian Mahantango Formation, a siltstone and shale. Glacial deposits, which consist of stratified sand and gravel overly the bedrock, occur in thicknesses of 0 to 20 feet, except when infilling buried bedrock valleys when the thickness can exceed 80 feet. The wells likely are completed in the glacial deposits, but the SSES was unable to provide well logs.

In September 2006, PPL requested a license renewal from NRC extending the term of the operating licenses by 20 years, from July 2022 to July 2042 (Unit 1) and from March 2024 to March 2044 (Unit 2). The project sponsor has requested that the Commission extend the term of its approval to 37 years to coincide with the requested 20-year license renewal of the SSES through March 23, 2044.

Aquifer Test. A 7-day, constant-rate aquifer test of Well TW-2 was conducted on December 7-14, 1992. In addition to the production well and Well TW-1, three piezometers and one observation well were monitored. A separate stepped-rate pumping test of Well TW-2 preceded the constant-rate aquifer test. During the stepped-rate pumping test, Well TW-2 was pumped at rates varying from approximately 30 gallons per minute (gpm) to 90 gpm.

The testing was not pre-approved by Commission staff. With Well TW-2 pumping at 92 gpm, 37.16 feet of drawdown occurred at the production well after 7 days of pumping. Drawdown of 23.87 feet occurred at Well TW-1. No testing data was available for Well TW-1.

Coordination. Commission staff has coordinated with the NRC during review of the project. In October 2006, NRC received a request for approval of an EPU at the SSES that would increase the thermal power limit of the units. NRC has not acted on this request to date but has issued its draft environmental assessment statement for public comment. Commission staff has reviewed the environmental assessment and provided NRC staff with this docket for coordination with its permits.

Findings

The project is subject to Commission approval, monitoring, and reporting requirements, as per Commission Regulations §806.4(a)(1)(iii), §806.22, §806.23, and §806.30.

All water evaporated or otherwise lost from the cooling system or other power generation processes is considered to be a consumptive water use subject to Commission regulation.

As part of its application, PPL submitted a water use monitoring plan that proposes the continued use of cooling tower performance diagrams to account for daily consumptive water use. PPL also proposed replacement of two of the four carbon steel intake pipes with stainless steel pipes to eliminate the corrosion and fouling problems that prevent accurate metering. Commission staff has reviewed the plan and finds it to be acceptable as an interim measure, with modifications to account for evaporation off the spray pond.

However, as the SSES has demonstrated, it can successfully meter quantities of water well in excess of the amount withdrawn from any single pump located at the Susquehanna River intake structure to an accuracy within 2.5 percent. Commission staff recommends that PPL propose a permanent method to quantify the daily consumptive water use based on metering rather than estimation and averaging. The permanent monitoring plan should contain metering, accurate to within five percent, on the total water withdrawal from the Susquehanna River, on groundwater pumped from Wells TW-1 and TW-2, on the wastewater discharge on the diffuser discharge and other locations, as appropriate, as well as a schedule for implementation for review and approval by Commission staff. The plan should also contain a methodology to account for the instream evaporative loss that occurs as a result of the thermal loading from the diffuser discharge.

Should metering of the stainless steel intake pipe not provide improved accuracy, Commission staff will evaluate other proposed methods of measurement for suitability.

Should the proposed accounting procedure fail to measure the SSES's consumptive water use and total water withdrawal from the Susquehanna River, the Commission reserves the right to modify the measuring, monitoring, and accounting procedures. Commission staff will provide the project sponsor with prior written notice of any required change in the measuring,

monitoring, and accounting procedures. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor must be reviewed and approved by Commission staff.

Although the Docket currently requires that the project sponsor keep daily records of consumptive water use and report these data to the Commission annually, Commission staff recommends that the reporting frequency be changed to quarterly, as specified in Commission Regulation §806.30(b)(1).

The project was previously approved for the consumptive use of 40.000 mgd of water on a 30-day average, not to exceed a daily peak usage of 48.000 mgd. PPL has requested approval of up to 48.000 mgd as a peak day and the elimination of the requirement that limits the 30-day average consumptive water use to 40.000 mgd. Commission staff recommends approval of the requested increase of consumptive water use of up to 48.000 mgd (peak day).

The project's consumptive use of water is subject to mitigation requirements, as per Commission Regulation §806.22. Currently, as approved in the Docket, consumptive water use mitigation is provided by releases of water from the Cowanesque Reservoir to the Susquehanna River during periods of low flow, under an Operations/Release Plan approved by Commission Resolution No. 89-12. That plan prescribes the amounts of releases to be made whenever the natural flow at Wilkes-Barre and/or Harrisburg is less than or equal to Q7-10 flow plus the amount of consumptive use. This mitigation method applies to full or partial operation of the SSES, but not when both Units 1 and 2 are shut down.

The project sponsor proposes to continue utilizing the current method to satisfy its water mitigation requirements. Provided that the project sponsor continues to comply with the terms of the Contract, Commission staff finds that PPL may continue to use the releases of water storage from the Cowanesque Reservoir to mitigate up to 40.000 mgd based on a 30-day average of consumptive water use. Commission staff recommends that the approved method of mitigation for consumptive use in excess of 40.000 mgd based on a 30-day average be payment of the Commission's prevailing consumptive use fee.

The existing surface water withdrawal predates the effective date of Commission Regulation §806.4(a)(2)(iv); however, the project sponsor's increase in withdrawal from the Susquehanna River related to the proposed EPU triggers Commission review and approval. Commission staff recommends approval of the requested surface water withdrawal of up to 66.000 mgd (peak day), as submitted by the project sponsor.

The use of Wells TW-1 and TW-2 predates July 13, 1978, and did not previously require approval by the Commission. The project sponsor has requested waivers from the Commission's required aquifer testing for the wells, and submitted a 1992 aquifer test report for Well TW-2. Commission staff recommends approval of the waivers. Pumping at Wells TW-1 and TW-2 at the requested rates is not expected to cause any adverse impacts to other groundwater users, as there are no nearby wells.

Commission staff recommends approval of a 30-day average withdrawal of 0.072 mgd from Well TW-1 and 0.125 mgd from Well TW-2, and a total groundwater withdrawal of 0.125 mgd. Commission staff recommends approval of peak instantaneous pumping rates of 50 gpm for Well TW-1 and 150 gpm for Well TW-2, the capacities of the well pumps.

The project is subject to Commission monitoring and reporting requirements, as per Commission Regulation §806.30. The project sponsor should install appropriate meters on its surface water withdrawal from the Susquehanna River, and monitor its withdrawal daily. Currently, one meter is used to measure withdrawals from both wells. Commission staff recommends that the project sponsor maintain the meter for Wells TW-1 and TW-2, and monitor withdrawals daily. The project sponsor should report withdrawal data from surface water and groundwater to the Commission quarterly.

The second (“measurement uncertainty recapture”) uprate was implemented by the project sponsor at Units 1 and 2 in 2001 and 2002, respectively. No request for approval of increase in surface water withdrawal was submitted to the Commission for this second uprate. Commission staff contends that the modifications made in 2001 and 2002 as a result of the second uprate caused an increase in the amount of water withdrawn at the project in excess of 100,000 gallons per day (gpd) above that which it was withdrawing prior to May 11, 1995. Therefore, the increase triggered Commission approval pursuant to §803.44(a)(2) of the regulations in effect at that time. The project sponsor does not agree with Commission staff; however, the project sponsor has offered a settlement to the Commission to resolve this matter. Commission staff recommends acceptance of the project sponsor’s proposed settlement.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.16, and in accordance with Commission Resolution No. 2005-03. The project sponsor has requested a waiver of the Commission’s required notice of the groundwater withdrawal application, based on the wells remote location, the amount of withdrawal, and the historic operation. Commission staff recommends approval of the request. The project sponsor has provided all other proofs of notification, as required by Commission Regulation §806.15.

No adverse impacts to other area surface water or groundwater withdrawals are anticipated. The project is physically feasible, does not conflict with or adversely affect the Commission’s Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

PPL has requested that the Commission extend the term of approval to coincide with its requested 20-year renewal of the NRC license for the SSES (through March 23, 2044). The requested 37-year term of approval has not been approved by NRC and is much longer than the Commission’s standard 15-year term for new approvals. In consideration of these facts, Commission staff recommends that this approval remain effective until March 9, 2025, the term of the prior Docket approval.

Decision

1. Commission Docket No. 19950301, as approved March 9, 1995, is hereby modified to approve the surface water withdrawal of up to 66.000 mgd (peak day) from the Susquehanna River; the groundwater withdrawal (30-day averages) of 0.072 mgd from Well TW-1 and 0.125 mgd from Well TW-2, and a total groundwater withdrawal of 0.125 mgd; and the consumptive water use of up to 48.000 mgd (peak day) pursuant to Article 3, Section 3.10, of the Compact.
2. The project's 30-day average consumptive use limit of up to 40.000 mgd is rescinded.
3. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.
4. Conditions "a," "b," "d," and "e" of the existing approval (Docket No. 19950301) are hereby rescinded.
5. The project sponsor shall comply with all Commission regulations, including monitoring and reporting requirements, as per Commission Regulation §806.30.
6. Within one hundred twenty (120) days from the date of this approval, the project sponsor shall submit a plan to the Commission for review and approval by Commission staff that accounts for all water withdrawn from the Susquehanna River and the total consumptive water use at the facility. The project sponsor shall propose a methodology to account for their consumptive water use based on metering or other approved methods, rather than estimation. Following approval, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule, but not longer than four (4) years from the date of this approval. The project sponsor shall notify the Commission, in writing, when the meters are installed and certify the accuracy of the measuring devices to within five (5) percent of actual flow. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented.
7. The project sponsor shall keep daily records of the project's consumptive water use, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity evaporated or otherwise lost from the cooling system or other power generation processes, including losses from the river surface due to thermal loading.
8. The project sponsor shall, as an interim measure, account for total consumptive water use at the facility using the procedures outlined in the water monitoring plan modified to account for evaporation off of the spray pond and off the river surface due to thermal loading. Within thirty (30) days from the date of this approval, the project sponsor shall submit the modified water monitoring plan to the Commission for review and approval by Commission staff. The interim monitoring measure shall expire four (4) years from the date of this approval.

9. The project sponsor shall keep daily records of the metered withdrawal from Wells TW-1 and TW-2. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

10. The maximum instantaneous rate of production from Wells TW-1 and TW-2 shall not exceed 50 gpm and 150 gpm, respectively, and the wells shall not be operated simultaneously.

11. The project sponsor shall maintain the meter for Wells TW-1 and TW-2, accurate to within five (5) percent, to measure its groundwater withdrawal.

12. The project sponsor shall keep daily records of the project's surface water withdrawal and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

13. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

14. The project sponsor has offered a settlement by agreement pursuant to Commission Regulation §808.18, in the amount of \$500,000, for its alleged noncompliance with Commission regulations, and is hereby accepted. Except where the full amount of same has been tendered to the Commission in advance hereof, this action shall be contingent upon, and shall not be effective until payment of the settlement amount is made to the Commission or arrangements for such payment have been made that are acceptable to the Executive Director of the Commission. Failure to make such payment or payment arrangement with the Commission within forty-five (45) days hereof shall render this approval null and void.

15. The project sponsor shall comply with applicable Commission water conservation requirements as per Commission Regulation 806.25(b).

16. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall continue to comply with the terms set forth in a Contract with the Commission for water supply storage at the Cowanesque Reservoir and make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of 40,000 mgd based on a 30-day average. The daily quantity of water consumptively used shall be the quantity evaporated or otherwise lost from the cooling system or other power generation processes. Payment amounts shall be calculated by applying this rate to the 30-day average amount of water used consumptively by the project, calculated daily, in excess of 40,000 mgd. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

17. The notification requirements specified in Commission Regulation §806.15 are hereby waived for the groundwater withdrawal application.

18. The constant-rate aquifer testing requirements specified in Commission Regulation §806.12 are hereby waived.

19. If the Commission determines that the operation of the project's groundwater withdrawal from Wells TW-1 and TW-2 adversely affects any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

20. To satisfy the Commission's registration requirement, the project sponsor shall register with the Pennsylvania Department of Environmental Protection all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Planning Act (Pennsylvania Act 220).

21. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

22. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

23. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

24. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

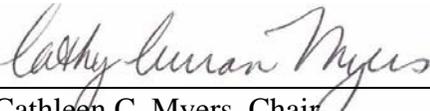
25. All other conditions in Commission Docket No. 19950301 not inconsistent herewith shall remain effective.

26. Based on Commission Regulation §806.31(a), this approval is effective until March 9, 2025. The term of this docket modification is in accordance with the term of the prior Docket approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than September 9, 2024, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

27. If the project is discontinued for such a period of time and under such circumstances that an abandonment of the project may reasonably be inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20070904

Approval Date: September 12, 2007

BIONOL CLEARFIELD, LLC

Surface Water Withdrawal of up to 2.505 mgd from the West Branch Susquehanna River,
and a Consumptive Water Use of up to 2.000 mgd (Peak Day),
for Manufacture of Anhydrous Ethanol,
Clearfield Borough, Clearfield County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the applications on July 20, 2007.

Description

Purpose. The purpose of the applications is to request approval for a surface water withdrawal and consumptive use of water associated with the production of anhydrous ethanol.

Location. The project is located in the West Branch Susquehanna Subbasin, HUC 02050201, West Branch Susquehanna River Watershed, Clearfield Borough, Clearfield County, Pennsylvania.

Project Features. The project sponsor has requested approval for a maximum daily withdrawal of up to 2.505 million gallons per day (mgd) of water from the West Branch Susquehanna River, and a consumptive use of water of up to 2.000 mgd (peak day). Based on the design of the facility, the project sponsor estimates that the maximum average 30-day surface water withdrawal and consumptive water use will be approximately 2.503 mgd and 2.000 mgd, respectively. Annual average consumptive water use is anticipated to range from 1.500 to 1.750 mgd.

Bionol Clearfield, LLC is proposing to construct a dry mill ethanol production facility that will be designed to produce up to 108 million gallons per year of anhydrous ethanol from corn. As a byproduct of ethanol production, the facility will produce approximately 403,000 tons of distillers dried grains with solubles. Construction of the facility is anticipated to begin during the fourth quarter of 2007, with the anticipated production of anhydrous ethanol beginning in the first quarter of 2009.

The dry mill ethanol facility will have the following major process areas:

- Grain unloading, storage, handling, and milling;
- Mash preparation, cooking, and conversion;
- Fermentation;
- Distillation and dehydration;
- Stillage separation and evaporation;
- Corn distillers dried grains with solubles (DDGS) drying, storage, and load-out; and
- Ethanol denaturing, storage, and load-out.

Facility equipment will include four natural gas-fired boilers to supply process and heating steam; two natural gas-fired dryers; three natural gas-fired regenerative thermal oxidizers (RTO); two wet scrubbers; an emergency diesel engine/generator and diesel fire pump; a cooling tower; two flares; dry material receiving, handling, processing/storage equipment; and several product storage tanks. Process condensate and distillation wastewaters will be internally recycled and reused, where possible, to minimize overall water use.

The source of process water for the facility will be a withdrawal from the West Branch Susquehanna River. The intake will consist of a cylindrical wedgewire screen positioned upstream of the Raftsmen Memorial Dam in Clearfield Borough. The intake will be comprised of a submerged passive wedgewire intake screen system equipped with an air backwash system and a warm water discharge pipe to suppress the formation of frazzle ice, when required.

Water will be withdrawn from the river and used, either treated or untreated, for one or more of the following: fire protection, non-contact process cooling, processing, and incorporation into product. Water will be consumptively used at the facility for processing; non-contact process cooling; steam losses; incorporation into product, byproduct and wastes; and from evaporation.

Process water will be pretreated using multimedia and/or sand filters, if required, followed by Reverse Osmosis (RO). Filtration may be necessary to remove suspended solids (i.e., sand and silt) from the raw water supply to protect the downstream RO treatment train. RO treatment will be used to decrease the total dissolved solids concentration of the makeup water to limit the potential for scale formation during processing. RO permeate will be directed to the ethanol production process and RO reject water will be returned to the West Branch Susquehanna River. Based on limited raw water sampling and preliminary design specifications, the demineralized process makeup (RO permeate flow) will range from 1,200 gallons per minute (gpm) to 1,400 gpm, and the RO reject water flow will range from approximately 200 gpm to 450 gpm.

In addition to the RO reject water and water purification backwash water, the production of ethanol will generate boiler blowdown and cooling tower blowdown water, fugitive steam emissions, and wastewater from air purification devices. Process water will be metered and discharged to the West Branch Susquehanna River adjacent to the facility. Boiler blowdown is

estimated to range between 12 gpm and 16 gpm, and cooling tower blowdown is estimated to average 130 gpm.

Stormwater runoff at the facility will be collected and conveyed to one or more stormwater management basins for peak flow attenuation prior to discharge to the West Branch Susquehanna River.

Water for sanitary purposes at the facility will be supplied by Clearfield Municipal Authority and conveyed to the Clearfield Municipal Authority's wastewater treatment plant, which discharges to the West Branch Susquehanna River near the confluence of Clearfield Creek. The facility's potable water supply requirements are estimated to be a maximum 30-day average of 0.003 mgd, with a maximum day of 0.005 mgd.

Coordination. Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Northcentral Region Office during the review of the project. Among other permits from PADEP, the project sponsor must obtain a National Pollutant Discharge Elimination System (NPDES) permit for the proposed discharge(s) to the West Branch Susquehanna River. The PADEP will specify in the NPDES permit any treatment requirements of the process wastewater and stormwater prior to its discharge to the river.

Findings

The project is subject to Commission approval standards and reporting requirements, as per Commission Regulations §806.21, §806.22, §806.23, and §806.25.

All water evaporated by the facility's cooling towers by boilers, from any holding ponds, fugitive steam emissions and from various manufacturing processes, and incorporated into products, byproducts and wastes, is considered to be used consumptively.

The project sponsor will withdraw water via an intake on the West Branch Susquehanna River for its process operations. Water withdrawn from the Susquehanna River will be metered prior to being treated or used at the facility, and process wastewater (RO reject water, water purification backwash water, boiler blowdown and cooling tower blowdown water, and wastewater from air purification devices) discharged adjacent to the facility also will be metered. Commission staff recommends that the facility's consumptive water use be calculated as the total metered water withdrawn from the Susquehanna River, minus the metered process wastewater discharged from the facility (excluding collected stormwater).

Commission staff recommends the project sponsor submit a proposed metering plan to the Commission for review and approval at the completion of the final facility design and at least six months prior to the start-up of the facility. The plan should account for all water withdrawn from the river and the total consumptive water use at the facility, as well as account for water received via intermediate products from facilities off the property and any water entering the waste stream. If Commission staff determines that additional flow measuring, metering or monitoring devices are required, these shall be provided at the expense of the project sponsor, installed prior to operation in accordance with a schedule set by the Commission, and be accurate to within 5 percent.

The project sponsor should propose a methodology based on metering rather than estimation, and locations and specifications of all proposed meters should be provided. Commission staff recommends that the project sponsor plan to record both the metered inflow to the facility and measured outflow from the facility, and any other required meter readings, on a daily basis to determine the project's daily consumptive water use. All measurements should be recorded at approximately the same time each day.

Should the proposed metering plan and accounting procedure result in negative or otherwise inaccurate values, the Commission reserves the right to modify the metering and accounting procedure. Commission staff will direct the project sponsor, by written notice, of any required change in the metering and accounting procedure. Any alternative metering and accounting procedure will be reviewed and approved by Commission staff.

The project sponsor has requested a consumptive water use approval of up to 2.000 mgd. Based on the facility's design calculations provided by the project sponsor, Commission staff is recommending approval of the requested quantity. Should the project's future consumptive water use be expected to exceed a peak day of 2.000 mgd, the project sponsor must apply for a modification to this docket.

The project's consumptive use of water is subject to water mitigation requirements, as per Commission Regulation §806.22. To satisfy these requirements, the project sponsor proposes to provide monetary payments to the Commission quarterly.

The project sponsor proposes to operate a surface water intake on the West Branch Susquehanna River, located upstream of the Raftsmen Memorial Dam. Commission staff recommends that the intake design minimize potential aquatic impacts associated with impingement and entrainment through the use of technology consistent with standards defined in the Clean Water Act.

The project sponsor has requested a withdrawal of up to 2.505 mgd, at a maximum instantaneous pumping rate of 1,740 gpm. Based on the design calculations and preliminary water balance provided by the project sponsor, Commission staff is recommending approval of the requested rate and quantity. Meter(s) should be installed on the surface water intake in accordance with Commission Regulation §806.30, and the project sponsor should keep daily records of the withdrawal. The project sponsor should maintain meters so as to provide a continuous, accurate record of the withdrawal. Should the project's future withdrawal be expected to exceed a peak day of 2.505 mgd, the project sponsor must apply for a modification to this docket.

Based on the facility's design submitted by the project sponsor, the maximum instantaneous rate of withdrawal from the West Branch Susquehanna River is 2.505 mgd, or 1,740 gpm. The requested maximum withdrawal of 1,740 gpm is less than 10 percent of the 7-day, 10-year low flow (Q7-10 flow) of 55.69 cubic feet per second (cfs), or 26,944 gpm, for the West Branch Susquehanna River at the point of withdrawal. Therefore, no passby flow is required to protect aquatic resources and downstream users.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(b).

The project sponsor has paid the applicable application fee, in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

1. The project's surface water withdrawal from the West Branch Susquehanna River of up to 2.505 mgd, and the consumptive use of water of up to 2.000 mgd are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including consumptive water use and surface water withdrawal reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the project's consumptive water use, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity of water evaporated by the facility's cooling towers, by boilers, from any holding ponds and from various manufacturing processes, and incorporated into products, byproducts and wastes. Commission staff shall review and approve the method of calculation of evaporative loss from ponds.

5. The project sponsor shall submit a metering plan to the Commission for review and approval by Commission staff at the completion of the final facility design and at least six (6) months prior to the start-up of the facility. This plan shall account for all water withdrawn from the river and the total consumptive water use at the facility, as well as account for water received via intermediate products from facilities off the property and any water entering the waste stream. The plan also shall include a schedule for meter installation to be completed prior to operation. Following approval, the project sponsor shall execute the plan and complete any installation of meters in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, when the meters are installed and certify the accuracy of the measuring devices to within five (5) percent of actual flow. Prior to operation, the project sponsor shall notify the Commission that the monitoring plan has been implemented.

6. Prior to operation, the project sponsor shall install metering on the surface water withdrawal, accurate to within five (5) percent, and keep daily records of the project's surface water withdrawal. The project sponsor shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The project sponsor may propose alternative monitoring to the Commission for staff review and approval.

7. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

8. The maximum instantaneous rate of withdrawal from the intake(s) on the West Branch Susquehanna River shall not exceed 1,740 gpm.

9. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project. The daily quantity of water consumptively used shall be the quantity of water evaporated by the facility's cooling towers, by boilers, from holding ponds and from various manufacturing processes, and incorporated into products, byproducts and wastes. Payments shall be made quarterly and shall be calculated by applying this rate to the daily amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of mitigation, is subject to change at the Commission's discretion.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

11. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

12. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

13. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

14. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

15. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

16. This approval is effective until September 12, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 12, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

17. The project sponsor has a period of three (3) years from the date of this approval to commence its withdrawal and consumptive use or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

Exhibit A8

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20070905

Approval Date: September 12, 2007

WALKER TOWNSHIP WATER ASSOCIATION

Groundwater Withdrawal (30-Day Average) of 0.523 mgd from Snydertown Well 3,
and a Total System Withdrawal Limit (30-Day Average) of 0.523 mgd,
for Public Water Supply,
Walker Township, Centre County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on September 18, 2006.

Description

Purpose. The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

Location. The project is located in the West Branch Susquehanna Subbasin, HUC 02050204, Little Fishing Creek Watershed, Snydertown, Walker Township, Centre County, Pennsylvania.

Project Features. The project sponsor has requested approval for withdrawal (30-day average) of 0.860 million gallons per day (mgd) from Snydertown Well 3 to be used as an additional source of water for the public supply system. Commission staff recommends approval of a lesser quantity based on the projected system demand, as described below.

Walker Township Water Association (WTWA) is a private association which supplies water to Walker, Spring, and Marion Townships. The Commission previously approved a groundwater withdrawal of 0.320 mgd (30-day average) for WTWA's Hecla Well 1 (formerly referred to as the Nittany Country Club Well) in Commission Docket No. 19910302, dated March 14, 1991. WTWA's Zion Well 2 (formerly referred to as the Sand Ridge Well) also was previously approved by the Commission for groundwater withdrawal of 0.600 mgd (30-day average) in Commission Docket No. 19950906, dated September 14, 1995, which also specified a total system withdrawal limit (30-day average) of 0.600 mgd.

Subsequent to the Commission approvals, the Pennsylvania Department of Environmental Protection (PADEP) issued a permit for Hecla Well 1 to withdraw 220 gallons per minute (gpm) (Water Supply Permit No. 1484502) and for Zion Well 2 to withdraw 300 gpm (Water Supply Permit No. 1495502).

WTWA has submitted this application for use of the Snyderstown Well 3 due to current and anticipated construction of 700 new homes in its service area. WTWA proposes to operate the new well intermittently and at variable pumping rates in response to demand, well water level, and system hydraulics.

The following table summarizes each well used by WTWA for the public water supply system.

Well Identification	Date of Docket Approval	Commission Approved 30-Day Average (mgd)	PADEP Permitted Withdrawal (gpd)	Reported Pump Capacity (gpm)	Reported Average Daily Withdrawal (mgd)
Hecla Well 1	3/14/1991	0.32	220	200	0.144
Zion Well 2	9/14/1995	0.60	300	300	0.288
gpd – gallons per day					

Specific locational information concerning discrete water-related project features has been withheld for security reasons. Snyderstown Well 3 is located north of Little Fishing Creek, which is a tributary to the Bald Eagle Creek. Hecla Well 1 also is located in the Little Fishing Creek Watershed. Zion Well 2 is located in the Nittany Creek Watershed.

Snyderstown Well 3 was constructed as an open-rock, 12-inch-diameter borehole to a total depth of 480 feet below ground surface (bgs). The well was cased with steel casing from the ground surface to 285 feet bgs. It is completed in fine- to coarse-grained dolomite, with a major fracture/water-bearing zone at 450 to 452 feet bgs.

The new well is located in the Upper Sandy Member of the Gatesburg Formation where regional bedrock strike is approximately 60 degrees to the northeast and beds dip 15 to 20 degrees to the southeast. Groundwater flow in the aquifer appears to be toward the north-northwest.

The public water supply system has an existing average daily demand of 0.433 mgd, and an existing maximum daily demand of 0.733 mgd. The average and maximum daily demands are projected to grow to 0.523 and 0.962 mgd, respectively, by 2030.

Aquifer Test. A 48-hour, constant-rate aquifer test of Snyderstown Well 3 was conducted on May 9-11, 2006. The testing plan was reviewed and approved by Commission staff. A step test preceded the constant-rate aquifer test.

During the constant-rate testing, Snyderstown Well 3 was pumped at a rate of 819 gpm, and water levels were monitored in the test well, eleven observation wells, and four wetland piezometers. Flow data were measured at two locations in Little Fishing Creek. Maximum groundwater level drawdown in Snyderstown Well 3 at the end of the 48-hour test was 1.77 feet. Monitoring results of the aquifer test indicated that only one residential well of the eleven observation wells showed measurable impact from pumping at Snyderstown Well 3; a drawdown of 0.57 feet was measured in a well located approximately 1,500 feet from and nearly along geologic strike with Snyderstown Well 3. A fracture trace also appears to connect these two wells.

Wetland monitoring showed no measurable impact from the testing, indicating that the wetlands are not hydraulically connected to water in Snyderstown Well 3.

Aquifer testing data and water quality data do not indicate that Snyderstown Well 3 was receiving recharge from Little Fishing Creek during the aquifer test. Little Fishing Creek appeared to be naturally losing water through streambank infiltration, streambed infiltration, and evaporation at the time of the testing.

Coordination. Commission staff has coordinated with the PADEP Northcentral Region Office during review of this project. The project sponsor submitted an application for public water supply for Snyderstown Well 3 to PADEP on July 30, 2007. PADEP staff has reviewed this docket for consistency with its requirements.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §806.4, §806.21, §806.23, and §806.30.

Commission staff reviewed the groundwater availability analysis, aquifer test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff recommends approval of the requested instantaneous pumping rate of 600 gpm for Snyderstown Well 3. However, based on projections of future demand submitted by the project sponsor, Commission staff recommends approval of a 30-day average withdrawal of 0.523 mgd from Snyderstown Well 3, which is less than the amount requested in the application.

Approval for a new withdrawal of 0.523 mgd from Snyderstown Well 3, combined with the prior approvals for the existing wells, Hecla Well 1 (0.320 mgd) and Zion Well 2 (0.600 mgd), exceed the average daily water demand of 0.523 mgd projected for the year 2030 for the public water system. Although Commission Docket No. 19950906, dated September 14, 1995, specified a higher system withdrawal limit of 0.600 mgd, Commission staff recommends limiting the total system withdrawal (30-day average) to the currently projected average quantity of 0.523 mgd. The system limit imposed in Commission Docket No. 19950906 should be superseded and its total system withdrawal limit be reduced accordingly.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered, which is in compliance with this regulation. However, WTWA reports unaccounted for water losses of

greater than 40 percent, which is not in compliance with Commission Regulation §806.25(a)(1). The Commission also noted unacceptably high water losses in its 1995 approval. The system losses were to be reduced to 20 percent or less by September 14, 1998.

Commission staff recommends that the project sponsor be allowed an additional 60 days from the date of this approval to submit a plan that describes the steps necessary to reduce its system losses to required levels and a proposed timeline for accomplishing the work. WTWA must demonstrate an aggressive effort to reduce system water losses to less than 20 percent in accordance with the Commission's water conservation requirements by September 12, 2009. The project sponsor should file annual reports to the Commission on the progress pursuant to this requirement.

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

Decision

1. The project's groundwater withdrawal (30-day average) of 0.523 mgd from Snyderstown Well 3, and a total system withdrawal limit of 0.523 mgd (30-day average) are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals from Snyderstown Well 3 and the total groundwater withdrawal. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, the project sponsor shall install a meter, accurate to within five (5) percent, on Snyderstown Well 3. The project sponsor shall notify the Commission, in writing, when the meter is installed.

6. The maximum instantaneous rate of production from Snyderstown Well 3 shall not exceed 600 gpm.

7. Within sixty (60) days of the date of this approval, the project sponsor shall submit its plan to the Commission to reduce system water losses to less than 20 percent to comply with Commission Regulation §806.25(a)(1). The plan shall describe an aggressive effort to reduce system losses within two years of the date of this docket (by September 12, 2009). The project sponsor shall report to the Commission annually on the progress made pursuant to this requirement.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a). The project sponsor shall have reduced system losses and achieved 100 percent compliance with the requirements by September 12, 2009, unless an extension of time is granted due to extenuating circumstances described, in writing, by the project sponsor. The project sponsor shall report its system loss to the Commission annually.

9. If the Commission determines that the operation of the project's groundwater withdrawal from Snyderstown Well 3 adversely affects any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

10. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

11. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

12. This approval does not become effective until the project sponsor certifies to the Commission that it has received permits from PADEP for use of Snyderstown Well 3.

13. To satisfy Commission's registration requirement, the docket holder shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Planning Act (Pennsylvania Act 220).

14. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

15. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

16. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

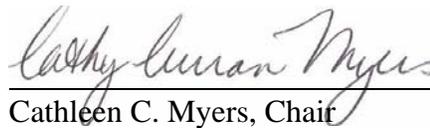
17. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

18. This approval is effective until September 12, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 12, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

19. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 19990502-1

Approval Date: May 13, 1999

Modification Date: September 12, 2007

BEDFORD TOWNSHIP MUNICIPAL AUTHORITY– BOWMAN WELLS 1 AND 2

Groundwater Withdrawals (30-Day Averages) of
0.324 mgd from Bowman Well 1 and 0.100 mgd from Bowman Well 2,
for Public Water Supply,
Bedford Township, Bedford County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application for modification on May 21, 2007.

Description

Purpose. The purpose of the modification is to request approval for an increase in its withdrawal from Bowman Well 1 from 0.160 million gallons per day (mgd) to 0.324 mgd, as a 30-day average. No request has been made to increase the withdrawal from Bowman Well 2. The Commission originally approved the project on May 13, 1999, as Docket No. 19990502 (docket). As approved, the project sponsor was authorized to withdraw (30-day averages) 0.160 mgd from Bowman Well 1 and 0.100 mgd from Bowman Well 2, with a total system withdrawal limit of 0.260 mgd for use in the public water supply system, subject to conditions enumerated in the docket.

According to the project sponsor, the original groundwater withdrawal application mistakenly requested a 30-day average withdrawal from Bowman Well 1 that met current (1999) system needs but did not consider future demand projections. The constant-rate aquifer testing of Bowman Well 1 was successfully completed at a pumping rate of 225 gallons per minute (gpm) (0.324 mgd), and Commission staff has determined that additional testing is not necessary. This docket modification approves the requested increase from Bowman Well 1, rescinds the total system withdrawal limit for the Bowman Wells, and changes certain provisions contained within the docket in accordance with recent modifications of Commission regulations.

Findings

Bowman Wells 1 and 2 are part of the Bedford Township Municipal Authority's (BTMA's) public water supply system, which relies on groundwater withdrawals from the Schaffer Tract Wells 1 and 2 (Commission Docket No. 20060904) and the Hotel Well 1 (Commission Docket No. 20060905), and on an interconnection with the Bedford Borough Authority (Commission Docket No. 19930906).

The Bowman Wells, Schaffer Tract Wells, an interconnection with Bedford Borough Authority, and two storage tanks (the 0.500-million-gallon Turnpike Tank and the 0.338-million-gallon Tank No. 2) will be utilized to service the southeastern, eastern, and northeastern parts of the township, while Hotel Well 1 and a 0.533-million-gallon storage tank will be used primarily to supply the Bedford Springs Hotel Authority in the southwestern part of the township. While the Hotel Well has been brought on-line, the Schaffer Tract Wells will not be available until later in 2008.

Until the Shaffer Tract Wells are brought on-line, the Bowman Wells are the only source of supply in the eastern half of the BTMA water supply system.

BTMA provides water service to most of Bedford Township. The current average daily demand in the eastern half of the BTMA system is approximately 0.209 mgd, and projected average daily demand through 2030 is 0.513 mgd, with a projected peak day demand of 0.826 mgd. Wastewater will be treated at Bedford Borough's wastewater treatment plant and discharged to the Raystown Branch of the Juniata River, approximately 6,700 feet south of the Bowman wells.

Bowman Well 1 is described in the docket. Commission staff finds that the 48-hour, constant-rate pumping test for Bowman Well 1, conducted in August 1998 under drought conditions, meets the requirement of Commission Regulation §806.12.

Commission staff reviewed the groundwater availability analysis, pumping test results, and supporting information previously submitted by the project sponsor. The aquifer test highlights the confined nature of the Ridgeley Sandstone, the predicted preferential drawdown along strike, and the well interference between Bowman Wells 1 and 2. Wells sited in the highly transmissive and laterally expansive Ridgeley Sandstone aquifer will likely draw water from extensive distances along strike within the Ridgeley Sandstone, to the northeast and the southwest of the well field. In time, it is likely that the Bowman Wells will induce recharge from Dunning Creek where Dunning Creek is truncated by the Ridgeley Formation approximately 1,400 feet to the southwest of the well field, but this will be less than 10 percent of the Q7-10 flow, so no passby flow is required to protect aquatic resources and downstream uses. Groundwater withdrawal at the requested rate is not anticipated to cause adverse impacts to local groundwater users or the environment.

Based on this information, Commission staff concludes that the requested increase in the withdrawal rate from Bowman Well 1 up to 0.324 mgd (30-day average) be approved. The maximum instantaneous pumping rate should be limited to 225 gpm.

The existing docket has a total system withdrawal limit of 0.260 mgd for the Bowman Wells, which Commission staff recommends be rescinded. The total public water supply system withdrawal currently is approved for 0.993 mgd utilizing the following groundwater sources: the Bowman Wells, the Schaffer Tract Wells, and Hotel Well 1. This limit is consistent with the sustainable yields of existing sources and will continue to satisfy the projected system demand through 2030.

The project sponsor shall comply with all Commission regulations, including monitoring and reporting requirements, as per Commission Regulation §806.30. The project sponsor should keep daily records of the metered withdrawal and report these data quarterly.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a).

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

Decision

1. The project's groundwater withdrawals (30-day averages) of 0.324 mgd from Bowman Well 1 and 0.100 mgd from Bowman Well 2 are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The system withdrawal limit of 0.260 mgd specified in the existing approval is rescinded. Conditions "a," "d," "f," "g," "h," and "i" of the existing approval are hereby rescinded.

4. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

5. The project sponsor shall keep daily records of the metered withdrawals from Bowman Wells 1 and 2. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

6. The maximum instantaneous rate of production from Bowman Well 1 shall not exceed 225 gpm.

7. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a). The project sponsor shall report its system loss to the Commission annually.

8. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

9. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.

10. This approval does not become effective until the project sponsor certifies to the Commission that it has received permits from PADEP for use of Bowman Well 1.

11. To satisfy the Commission's registration requirement, the docket holder shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Planning Act (Pennsylvania Act 220).

12. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

13. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

14. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

15. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation

of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

16. This approval is effective until May 13, 2024, the term of the existing approval. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than November 13, 2023, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

Exhibit A10

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Web <http://www.srbc.net>

Docket No. 20070907

Approval Date: September 12, 2007

DILLSBURG AREA AUTHORITY

Groundwater Withdrawal (30-Day Average) of 0.460 mgd from Well 7,
and a Total System Withdrawal Limit (30-Day Average) of 1.112 mgd,
for Public Water Supply,
Carroll Township, York County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application on November 13, 2006, and additional information on December 7, 2006 and August 1, 2007.

Description

Purpose. The purpose of the application is to request approval for the withdrawal of groundwater for distribution in a public water supply system.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050305, Yellow Breeches Creek Watershed, Carroll Township, York County, Pennsylvania.

Project Features. The project sponsor has requested approval for withdrawal (30-day average) of 0.460 million gallons per day (mgd) from Well 7 to be used as an additional source of water for the public supply system that currently relies on five wells; Wells 1 through 5A. Well 2 is currently off-line and Well 6 is abandoned.

The Commission previously approved a groundwater withdrawal of 0.216 mgd (30-day average) for Well 4 in Commission Docket No. 19890304, dated March 9, 1989. Well 5A was previously approved by the Commission for a groundwater withdrawal of 0.576 mgd (30-day average) in Commission Docket No. 19980703, dated July 9, 1998, which also specified a total system withdrawal limit (30-day average) of 1.000 mgd.

Specific location information concerning discrete water-related project features has been withheld for security reasons. Well 7 is located in the flood plain of Yellow Breeches Creek, approximately 400 feet from the stream.

Well 7 was constructed as an open-rock, 10-inch-diameter borehole to a total depth of 510 feet below ground surface (bgs). The well was cased with 10-inch-diameter steel casing from the ground surface to 55.5 feet bgs. It is completed in dark gray limestone with calcite veins and some dolomite with major fractures/water-bearing zones at 365 feet bgs and from 469 to 472 feet bgs.

The new well is located in the Elbrook Formation, on the south limb of an easterly plunging anti-form in the carbonate formations of the Cumberland Valley. Groundwater flow in the aquifer appears to be toward the north-northwest.

Dillsburg Area Authority serves Dillsburg Borough, and parts of Carroll and Franklin Townships. The public water supply system has an existing average daily demand of 0.408 mgd, and an existing maximum daily demand of 0.654 mgd. The average and maximum daily demands are projected to grow to 1.112 and 1.890 mgd, respectively, by 2020.

Aquifer Test. A 48-hour, constant-rate aquifer test of Well 7 was conducted on July 24-26, 2007. The testing plan was reviewed and approved by Commission staff. A step test preceded the constant-rate aquifer test. Previous aquifer testing in 2005 indicated the well would benefit from further development.

During the constant-rate testing, Well 7 was pumped at a rate of 320 gallons per minute (gpm), and water levels were monitored in the test well, four observation wells, and four shallow piezometers. Maximum groundwater level drawdown in Well 7 at the end of the 48-hour test was approximately 173 feet. Monitoring results indicated that impacts to the observation wells were minimal. Wetland monitoring showed impacts from the testing in the deeper root zone, which will be limited during operation due to Well 7's connection to the Yellow Breeches Creek. Well 7 is hydraulically connected to the Yellow Breeches Creek, but because the withdrawal is less than 10 percent of the Q7-10 low flow (62 cubic feet per second [cfs] or 28,018 gpm), a passby flow is not required to protect instream aquatic uses.

Coordination. Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP) Southcentral Region Office during review of this project. PADEP staff has reviewed this docket for consistency with its requirements.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §806.4, §806.21, §806.23, and §806.30.

Commission staff reviewed the groundwater availability analysis, aquifer test results, and supporting information submitted by the project sponsor. Based on this information, Commission staff recommends approval of the requested instantaneous pumping rate of 320 gpm and the requested 30-day average withdrawal of 0.460 mgd from Well 7.

Commission staff recommends approval of a total system limit (30-day average) of 1.112 mgd from all wells, as requested. Commission Docket No. 19980703, dated July 9, 1998, specified a system withdrawal limit of 1.000 mgd. Commission staff recommends that the system limit imposed in Commission Docket No. 19980703 be superseded.

The project sponsor's withdrawals from Wells 1, 2, and 3 are subject to review and approval under Commission Regulation §806.4(a)(2)(iv). Commission staff recommends that the project sponsor submit applications for these withdrawals within 180 days of the date of this approval.

The project is subject to the Commission's water conservation requirements, as per Commission Regulation §806.25(a). The water system is 100 percent metered and the project sponsor reports its system water loss is less than 20 percent, which is in compliance with this regulation.

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §806.13, and in accordance with Commission Resolution No. 2006-08. The project sponsor has provided all proofs of notification as required by Commission Regulation §806.15.

The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

This project is not required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and will not significantly affect the water resources of the basin.

Decision

1. The project's groundwater withdrawal (30-day average) of 0.460 mgd from Well 7, and a total system withdrawal limit of 1.112 mgd (30-day average) are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including groundwater withdrawal monitoring and reporting requirements contained in Commission Regulation §806.30.

4. The project sponsor shall keep daily records of the metered withdrawals from Well 7 and the total groundwater withdrawal. The required reporting data shall be submitted to the Commission quarterly, and as otherwise required. Monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter.

5. Within sixty (60) days from the date of this approval, and prior to withdrawing water from Well 7, the project sponsor shall install a meter, accurate to within five (5) percent, on Well 7. The project sponsor shall notify the Commission, in writing, when the meter is installed.
6. The maximum instantaneous rate of production from Well 7 shall not exceed 320 gpm.
7. Within one hundred eighty (180) days of the date of this approval, the project sponsor shall submit withdrawal applications from Wells 1, 2 and 3, in accordance with Commission Regulation §806.4(a)(2)(iv).
8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(a). The project sponsor shall report its system loss to the Commission annually.
9. If the Commission determines that the operation of the project's groundwater withdrawal from Well 7 adversely affects any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.
10. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.
11. Pursuant to Article 12, Section 12.2, of the Compact, this project is hereby included in the Commission's Comprehensive Plan.
12. This approval does not become effective until the project sponsor certifies to the Commission that it has received permits from PADEP for use of Well 7.
13. To satisfy the Commission's registration requirement, the docket holder shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Planning Act (Pennsylvania Act 220).
14. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.
15. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

16. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or water resources. The Commission, upon its own motion, may at any time reopen any project approval and make additional corrective modifications that may be necessary.

17. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

18. This approval is effective until September 12, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 12, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

19. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

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Docket No. 20070908

Approval Date: September 12, 2007

PPL BRUNNER ISLAND, LLC– BRUNNER ISLAND STEAM ELECTRIC STATION

Surface Water Withdrawal of up to 835.000 mgd from the Susquehanna River,
and Consumptive Water Use of up to 23.100 mgd (Peak Day),
for Power Plant Operation,
East Manchester Township, York County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulation §806.4, relating to projects requiring review and approval. The Commission received the application for consumptive water use on September 18, 2006, and the application for existing surface withdrawal on July 16, 2007.

Description

Purpose. The purpose of the application is to request approval for consumptive water use and surface water withdrawal for processes related to operations at the Brunner Island Steam Electric Station (Brunner Island SES).

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050306, East Manchester Township, York County, Pennsylvania.

Project Features. PPL Brunner Island, LLC (PPL Brunner Island), the project sponsor, has requested approval for consumptive water use of up to 23.100 million gallons per day (mgd) on a peak day, of which up to 15.000 mgd will be new consumptive use related to the planned installation of cooling towers and flue gas desulfurization systems (FGD systems or scrubbers). The project sponsor also has requested approval for a water withdrawal of up to 835.000 mgd (peak day) from the Susquehanna River. The present rate of withdrawal is not expected to increase as a result of the planned installations.

The project consists of three base-load, coal-fired, steam electric generating units, known as Units 1, 2, and 3. Units 1, 2, and 3 began operation in 1961, 1965, and 1969, respectively, and each unit has an open-cycle (once-through) cooling system with its own intake on the Susquehanna River. The total maximum water withdrawal from the river is approximately

835.000 mgd, limited by the capacity of the existing cooling water supply pumps. Essentially all of this water is used for cooling spent steam in the condensers of the three units' cooling systems, and the cooling water is returned to the river downstream from the plant via a common, 2,200-foot discharge channel. The project sponsor describes the discharge water as essentially undiminished in quantity and quality, except for the elevated temperature. A small portion of the water withdrawn from the river is used for miscellaneous plant purposes, such as sluicing.

Currently, consumptive water losses at the Brunner Island SES primarily result from instream evaporation induced by thermal loading from the cooling water discharged to the river. The nominal maximum heat rejection rate is 6,960 million British thermal units (Btu) per hour. The project sponsor estimated the current rate of instream evaporation to be 13.100 mgd as a maximum daily average and 12.100 mgd as a maximum 30-day average, assuming full-load plant operation.

Pursuant to a settlement agreement with the Pennsylvania Department of Environmental Protection (PADEP), the project sponsor intends to install mechanical draft evaporative cooling towers along the existing plant discharge canal to reduce the temperature of the discharge to the river. The towers are expected to be operational in 2010. The project sponsor also intends to install wet-limestone, forced oxidation FGD systems for the reduction of sulfur dioxide emissions at Units 1, 2, and 3. The FGD systems are expected to become operational in 2008 (Unit 3) and 2009 (Units 1 and 2). These improvements will increase consumptive water use at the facility.

The cooling towers are expected to operate during the period March through November. When operating, the entire cooling water discharge will be diverted to the cooling towers and resulting consumptive use is calculated to be 17.200 mgd for a full-load plant operation maximum day (under design conditions that result in the removal of all of the heat added to the cooling water when passing through the condensers). During conditions other than design conditions, the cooling towers do not remove all of the heat added to the water and some residual heat will be discharged to the river (the discharge temperature will be higher than the ambient river temperature), resulting in some in-river evaporation. The project sponsor calculates that the consumptive use from cooling tower loss plus in-river evaporation will be 16.400 mgd as a maximum full-load plant operation daily average and 15.400 mgd as a maximum full-load plant operation 30-day average.

Water for the FGD systems will be taken from the cooling water flow at the steam condensers; total water use for the three units will be approximately 8.600 mgd. Consumptive water use from operation of the FGD units is estimated to be 5.700 mgd on a peak day and 4.500 mgd as maximum 30-day average.

Findings

The project is subject to Commission approval, monitoring, and reporting requirements, as per Commission Regulations §806.4(a)(1)(iii), §806.22, §806.23, and §806.30.

Although the project predates the Commission's consumptive water use and surface water withdrawal regulations, the project identified that its proposed addition of mechanical draft evaporative cooling towers and FGD systems will sufficiently increase consumptive water use to be subject to Commission Regulation §806.4, relating to consumptive use and withdrawal projects requiring review. The project sponsor has requested approval for consumptive water use of up to 23.100 mgd (peak day) and a surface water withdrawal of up to 835.000 mgd (peak day) from the Susquehanna River.

All water evaporated or otherwise lost from the cooling systems or other power generation processes, FGD systems, and evaporated off the river surface due to thermal loading is considered to be a consumptive water use subject to Commission regulation.

Commission staff recommends approval of the requested quantity of consumptive water use, 23.100 mgd on a peak day. The project sponsor should submit a plan to quantify the daily consumptive water use associated with operation of the plant and the thermal loading, and the project's total surface water withdrawal from the Susquehanna River for review and approval by Commission staff. The plan should contain metering that is accurate to within 5 percent, or other suitable methods of measurement, on the water diverted to the facility, on the wastewater and thermal discharges, and other locations, as appropriate, and on the total water withdrawal from the Susquehanna River. The project sponsor should report the daily consumptive water use and surface water withdrawal data to the Commission quarterly.

Should the proposed accounting procedure fail to measure PPL Brunner Island's total water withdrawal from and consumptive use of the Susquehanna River, the Commission reserves the right to modify the measuring, monitoring, and accounting procedures. Commission staff will provide the project sponsor with prior written notice of any required change in the measuring, monitoring, and accounting procedures. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor must be reviewed and approved by Commission staff.

Commission staff finds that consumptive water loss due to evaporation from the water surface associated with the facility's thermal discharge cannot be measured or metered directly. As such, this component of the facility's consumptive water use must be determined through indirect measurement and analytical procedures. The project sponsor has calculated the actual pre-Compact consumptive water to be 8.100 mgd, based on Commission staff's guidance regarding pre-Compact use as defined in Regulation §806.3 as "the maximum average daily quantity or volume of water consumptively used over any consecutive 30-day period prior to January 23, 1971." Commission staff concurs with this calculation of pre-Compact consumptive water use. For purposes of this docket, this quantity of consumptive water use is considered "grandfathered" and is exempt from water mitigation requirements.

The project sponsor has indicated its belief that it is entitled to a grandfathered amount at least equal to the full potential consumptive use that could have occurred at the project as of January 1971. Based on the definition contained in Regulation §806.3, Commission staff disagrees and finds that only the amount of actual consumptive use meets the definition of pre-Compact use.

Should the approved methodology for estimating future consumptive water use associated with the thermal component of the facility's discharge differ from the project sponsor's methodology used as a basis for the preparation of this docket, Commission staff recommends that the docket's pre-Compact consumptive water use be adjusted accordingly (i.e., the pre-Compact consumptive water use in the docket should be updated to reflect the same assumptions and analytical procedures approved for use in estimating future evaporative loss from the water surface associated with the facility's thermal discharge).

The project's consumptive use of water in excess of its grandfathered quantity is subject to mitigation requirements, as per Commission Regulation §806.22(b). To satisfy these requirements, the project sponsor proposes to provide monetary payments to the Commission.

The existing surface water withdrawal predates the effective date of Commission Regulation §806.4; however, the project sponsor's proposed increase in consumptive water use triggers Commission review and approval.

Commission staff recommends approval of the requested surface water withdrawal of up to 835.000 mgd (peak day), as submitted by the project sponsor. As described previously, the project sponsor should submit a plan to quantify the daily total surface water withdrawal from the Susquehanna River for review and approval by Commission staff. The plan should contain metering that is accurate to within 5 percent, or other suitable methods of measurement on the water diverted to the facility. The project sponsor should report the daily surface water withdrawal to the Commission quarterly.

The project sponsor has paid the appropriate application fee, in accordance with Commission Regulation §806.16, and in accordance with Commission Resolution No. 2005-03. The project sponsor has provided all proofs of notification, as required by Commission Regulation §806.15.

No adverse impacts to other area surface water withdrawals are anticipated. The project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

1. The project's surface water withdrawal from the Susquehanna River of up to 835.000 mgd and the project's consumptive use of water up to 23.100 mgd are approved pursuant to Article 3, Section 3.10, of the Compact.

2. The foregoing findings are hereby adopted and shall be incorporated into and made a part of this decision.

3. The project sponsor shall comply with all Commission regulations, including monitoring and reporting requirements, as per Commission Regulation §806.30.

4. Within one hundred twenty (120) days from the date of this approval, the project sponsor shall submit a plan to the Commission for review and approval by Commission staff that accounts for all water withdrawn from the river, the wastewater and thermal discharge, and the total consumptive water use at the facility. Following approval, the project sponsor shall execute the plan and complete any installation of meters or other approved methods of measuring surface water withdrawals and uses in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, when the meters are installed and certify the accuracy of the measuring devices to within five (5) percent of actual flow. The project sponsor shall notify the Commission when the monitoring plan has been implemented.

5. The project sponsor shall keep daily records of the project's consumptive water use and surface water withdrawal, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted on-line and are due within thirty (30) days after the close of the preceding quarter. The daily quantity of water consumptively used shall be the quantity evaporated or otherwise lost from the cooling system or other power generation processes, and evaporated off the river surface due to thermal loading.

6. To satisfy the Commission's current mitigation requirements for consumptive water use set forth in Commission Regulation §806.22, the project sponsor shall make quarterly payments to the Commission based on the rate of \$0.14 per 1,000 gallons of water consumptively used by the project in excess of the grandfathered quantity. The daily quantity of water consumptively used shall be the quantity evaporated or otherwise lost from the cooling system or other power generation processes, and evaporated off the river surface due to thermal loading. Payment amounts shall be calculated by applying this rate to the daily amount of water used consumptively by the project, less the grandfathered quantity of 8.100 mgd. If the daily grandfathered quantity exceeds the project's daily consumptive water use, that day's consumptive water use is considered to be zero. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

7. The project sponsor shall maintain any meters or other measuring devices approved by the Commission, accurate to within five (5) percent, so as to provide a continuous, accurate record of withdrawals and uses, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

8. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation §806.25(b).

9. Commission approval shall not be construed to exempt the project sponsor from obtaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission reserves the

right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

10. If the project sponsor fails to comply with the provisions of the Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project is subject to enforcement actions pursuant to Commission Regulation §808.

11. The Commission reserves the right to reopen any project docket or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

12. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

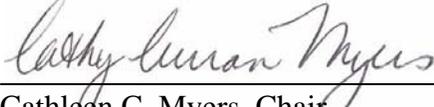
13. To satisfy the Commission's registration requirement, the project sponsor shall register with the PADEP all surface water and groundwater sources described in this docket in accordance with the Pennsylvania Water Resources Planning Act (Pennsylvania Act 220).

14. This approval is effective until September 12, 2022. As specified in Commission Regulation §806.31(e), if the project sponsor submits a renewal application no later than March 12, 2022, the existing approval shall be deemed extended until such time as the Commission renders decision on the application.

15. The project sponsor has a period of three (3) years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the project sponsor and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

By the Commission:

Dated: September 12, 2007



Cathleen C. Myers, Chair
Pennsylvania Commissioner

Proposed Rules

Federal Register

Vol. 72, No. 189

Monday, October 1, 2007

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

SUSQUEHANNA RIVER BASIN COMMISSION

18 CFR Parts 806 and 808

Review and Approval of Projects

AGENCY: Susquehanna River Basin Commission (SRBC).

ACTION: Notice of proposed rulemaking and public hearing.

SUMMARY: This document contains proposed rules that would amend project review regulations to clarify the definition of "agricultural water use" and to provide a qualified exception to the consumptive use approval requirements for agricultural water use projects. In addition, this proposed rule would make a technical correction to an error in the "Authority" citation for Part 808.

DATES: The Commission has scheduled a public hearing on the proposed rules on Wednesday, November 7, 2007, at 2 p.m. Comments on these proposed rules may be submitted to the SRBC on or before November 15, 2007.

The location of the public hearing is listed in the addresses section of this document. Additionally, individuals wishing to testify are asked to notify the Commission in advance, if possible, at the regular or electronic addresses given below.

ADDRESSES: Comments may be mailed to: Mr. Richard A. Cairo, Susquehanna River Basin Commission, 1721 N. Front Street, Harrisburg, PA 17102-2391, or by e-mail to rcairo@srbc.net.

The public hearing will be held in the Goddard Conference Room, Pennsylvania Department of Environmental Protection, Northcentral Regional Office, 208 West Third Street, Suite 101, Williamsport, PA 17701.

Those wishing to testify are asked to notify the Commission in advance, if possible, at the regular or electronic addresses given below

FOR FURTHER INFORMATION CONTACT: Richard A. Cairo, General Counsel, 717238-0423; fax: 717-238-2436; [e-mail: rcairo@srbc.net](mailto:rcairo@srbc.net). Also, for further information on the proposed rulemaking, visit the Commission's Web site at <http://www.srbc.net>.

SUPPLEMENTARY INFORMATION:

Background and Purpose of Amendments

The SRBC adopted final rulemaking on December 5, 2006, published at 71 FR 78570, December 29, 2006 establishing: (1) The scope and procedures for review and approval of projects under Section 3.10 of the Susquehanna River Basin Compact, Pub.

L. 91-575; 83 Stat. 1509 *et seq.* (the compact); (2) special standards under Section 3.4(2) of the compact governing water withdrawals, consumptive use of water; diversions of the basin's waters, water conservation, and water use registration; and (3) procedures for hearings and enforcement actions.

The December 2006 rulemaking made extensive revisions to project review regulations that were promulgated in May 1995. Since 1995, SRBC has continued to suspend the application of its consumptive use regulation to agricultural water uses pending the implementation of a mitigation method that is more suited to agriculture's unique circumstances.

The Commission's member states have taken definitive steps to support projects that will provide storage and release of water to mitigate agricultural water use in their jurisdictions and thus satisfy the standards for consumptive use mitigation set forth in 18 CFR 806.22. The proposed rulemaking would amend 18 CFR 806.4(a)(1) to provide an exception for agricultural water use projects from the consumptive use review and approval requirements of 18 CFR 806.4(a)(1) and (3), unless water is diverted for use beyond lands that are at least partially in the basin, and provided the Commission makes a determination that the state-sponsored projects are sufficient to meet the consumptive use mitigation standards contained in 18 CFR 806.22.

A second amendment clarifies the definition of "agricultural water use" in 18 CFR. 806.3, 806.4 and 806.6 by inserting the word "products" after the word "turf." This will clarify that the maintenance of turf grass as part of a project or facility, such as a golf course, does not constitute an agricultural water use. Only the raising of turf products for sale such as sod would constitute agricultural water use with this clarification.

A third amendment corrects an error made as part of the December 5, 2006 rulemaking in the "Authority" citation to Part 808 by replacing the erroneous Sec. 3.5(9) with the correct Sec. 3.4(9).

List of Subjects in 18 CFR Part 806

Administrative practice and procedure, Water resources.

For the reasons set forth in the preamble, the Susquehanna River Basin Commission proposes to amend 18 CFR parts 806 and 808 and as follows:

PART 806—REVIEW AND APPROVAL OF PROJECTS

1. The authority citation for part 806 continues to read as follows:

Authority: Secs. 3.4, 3.5 (5), 3.8, 3.10 and 15.2, Pub. L. 91-575, 84 Stat. 1509 *et seq.*

2. In § 806.3, revise the definition of "agricultural water use" to read as follows:

§ **806.3 Definitions.** *Agricultural water use.* A water use associated primarily with the raising of food, fiber or forage crops, trees, flowers, shrubs, turf products, livestock and poultry. The term shall include aquaculture.

3. In § 806.4, revise paragraphs (a)(1) introductory text, (a)(3) introductory text and (b)(3) to read as follows:

§ **806.4 Projects requiring review and approval.**

(a) * * *

(1) *Consumptive use of water.* Any consumptive use project described below shall require an application to be submitted in accordance with § 806.13, and shall be subject to the standards set forth in § 806.22, and, to the extent that it involves a withdrawal from groundwater or surface water, shall also be subject to the standards set forth in § 806.23. Except to the extent that they involve the diversion of the waters of the basin, public water supplies shall be exempt from the requirements of this section regarding consumptive use; provided, however, that nothing in this section shall be construed to exempt individual consumptive users connected to any such public water supply from the requirements of this section. Provided the commission determines that low flow augmentation projects sponsored by the commission's member states provide sufficient mitigation for agricultural water use to meet the standards set forth in § 806.22, and except as otherwise provided below, agricultural water use projects shall not be subject to the requirements of this paragraph (a)(1). Notwithstanding the foregoing, an agricultural water use project involving a diversion of the waters of the basin shall be subject to such requirements unless the property, or contiguous parcels of property, upon which the agricultural water use project occurs is located at least partially within the basin.
* * * * *

(3) *Diversions.* Except with respect to agricultural water use projects not subject to the requirements of paragraph (a)(1), the projects described below shall require an application to be submitted in accordance with § 806.13, and shall be subject to the standards set forth in § 806.24. The project sponsors of out-ofbasin diversions shall also comply with all applicable requirements of this part relating to consumptive uses and withdrawals.

* * * * *

(b) * * *

(3) Transfer of land used primarily for the raising of food, fiber or forage crops, trees, flowers, shrubs, turf products, livestock, or poultry, or for aquaculture, to the extent that, and for so long as, the project's water use continues to be for such agricultural water use purposes.

§ **806.6 Transfers of approval.**

(b) * * *

(3) A project involving the transfer of land used primarily for the raising of food, fiber or forage crops, trees, flowers, shrubs, turf products, livestock or poultry, or for aquaculture, to the extent that, and for so long as, the project's water use continues to be for such agricultural water use purposes.

* * * * *

PART 808—HEARINGS AND ENFORCEMENT ACTIONS

5. Revise the authority citation for part 808 to read as follows:

Authority: Secs. 3.4 (9), 3.5 (5), 3.8, 3.10 and 15.2, Pub. L. 91-575, 84 Stat. 1509 *et seq.*

Dated: September 21, 2007

Paul O. Swartz,

Executive Director.

[FR Doc. E7-19290 Filed 9-28-07; 8:45 am]

BILLING CODE 7040-01-P

