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OFFICE OF SECRETARY RULEMAKINGS AND ADJUDICATIONS STAFF

August 1, 2007

Paul O. Swartz Executive Director Susquehanna River Basin Commission 1721 North Front Street Harrisburg, PA 17102-2391

> Eric Joseph Epstein's Petition in Opposition to PPL Susquehanna, LLC Application for Surface Water Withdrawal Request to Modify Application 19950301-EPU-0572 and Formal Request for A Public Input Hearing Under Subpart A - Conduct of Hearings § 808.1

Dear Mr. Swartz:

Eric Joseph Epstein ("Epstein" or "Mr. Epstein") is formally filing his Petition in Opposition to PPL Susquehanna's, LLC Application for Surface Water Withdrawal Request to Modify Application 19950301-EPU-0572 at the Susquehanna River Basin Commission ("SRBC"), and formally requesting a Public Input Hearing under Subpart A - Conduct of Hearings § 808.1.

Eric Joseph Epstein, Pro se 4100/Hillsdale Koad Harrisburg, PA 17112 ericepstein@comcast.net (717)-541-1101

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TEMPLATES SECY-043

SEC 4-02

I hereby certify that on July 27, 2007, a copy of Eric Joseph Epstein's Notice of Intent to File A Petition in Opposition to PPL Susquehanna's, LLC Application for Surface Water Withdrawal Request to Modify Application 19950301-EPU-0572 the matter of the PPL Susquehanna LLC Proposed Amendment Requests for the Susquehanna Steam Electric Station's 1 & 2 was sent via electronic mail and by overnight delivery with tracking numbers to:

Michael Brownell Chief, Water Resource Management Division Susquehanna River Basin Commission 1721 North Front Street Harrisburg, PA 17102-2391

Paul E. Russell, Esquire PPL Electric Utilities Corporation Two North Ninth Street Allentown, PA 18101-1179

James J. McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120 DEP - RCSOB Cathleen Myers, DEP Deputy Secretary PO Box 2063 Market Street Harrisburg, PA 17105-2063 Office of the Secretary U.S. Nuclear Regulatory Commission 16th Floor One White Flint North 11555 Rockville Pike, Rockville, Maryland 20852 Attn: Rulemaking and Adjudications Staff

Office of the Secretary of the Commission U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 Attn: Rulemaking and Adjudications Staff

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## I. Background

On July 27, 2007, Eric Joseph Epstein, presently a Petitioner before the United Sates Regulatory Commission's ("NRC") in the matter of the PPL Susquehanna LLC ("PPL") Proposed Amendment Requests for the Susquehanna Steam Electric Station's 1 & 2 Would Increase Thermal Power to 3,952 Mega-Watts Which is 20% Above the Original Rated Thermal Power (RTP) 3293 MWt, and Approximately 13% Above the Current RTP of 3,489 MWt, Docket Nos. 50-387 PLA-6110 and 50-388, (1) officially announced his intent to file a Petition in Opposition to PPL Susquehanna's, LLC Application for Surface Water Withdrawal Request to Modify Application 19950301-EPU-0572.

After repeated requests and attempts to resolve numerous water use, water safety, and interagency issues with PPL Susquehanna and the Nuclear Regulatory Commission, it has become apparent to Mr. Epstein through filings, petitions, responses, and oral argument, that neither the NRC or PPL will address outstanding issues and noncompliance violations. The NRC has either relegated water use, water safety, and interagency issues to the domain of the Susquehanna River Basin Commission or deemed these challenges outside the scope of the present Nuclear Regulatory Commission uprate proceeding.

It is important that the Susquehanna River Basin Commission ("SRBC") evaluate Mr. Epstein's contentions while a parallel NRC proceeding has deferred or failed to act on water use, water safety and interagency challenges.

<sup>1</sup> PPL Susquehanna's requests before the NRC and the SRBC would extend the license of Susquehanna Unit 1 and 2 for an additional 20 years beyond the current expiration dates on July 17, 2022 and March 23, 2024. However, the Susquehanna nuclear power plant produces approximately **60 metric tons** of high-level radioactive waste **per year**. Susquehanna is one of 21 nuclear power plants where used reactor fuel pools have reached capacity.

Since there is no "agreement" or "understanding" between the NRC and the SRBC relating to the conduct of "respective reviews in a cooperative, coordinated manner," (2) it is incumbent upon the Susquehanna River Basin Commission to become the lead agency on PPL's Susquehanna, LLC Application for Surface Water Withdrawal Request to Modify Application, 19950301-EPU-0572.

Mr. Epstein's Technical Contention 1 (3), which was rejected by the Atomic Safety & Licensing Board on July 27, 2007, stated:

PPL failed to consider the impact of the proposed uprate on certain state and federal water use issues, and the potential impact these regulations will have on water flow, water volume and surface water withdrawal for the SSES's cooling systems. The traditional implications of the Pennsylvania Public Utility Commission ("Pa PUC") policy and regulations relating to "withdraw and treatment" of water, i.e., referred to as "cost of water" under the Public Utility Code, Title 66, have to be factored in this application absent a PUC proceeding as well as Act 220 water usage guidelines. PPL has not established (nor has the NRC reviewed) compliance milestones for EPA's Act 316 (a) or 316 (b) and their impact on power uprates at the Susquehanna Electric Steam Station.

<sup>2</sup> "Timing of SRBC Project Approvals Vis-à-Vis Signatory Approvals," Policy No. 9501, May 11, 1995, and § 806.7 Concurrent project review by member jurisdictions (Federal Register, December 29, 2006, p. 78583.)

3 On June 5, 2007, PPL and NRC filed Responses in opposition to Mr. Epstein's Contentions at the Nuclear Regulatory Commission. NRC staff alleged that Mr. Epstein's contention (T-1) is "outside of the scope" and "not material" to this proceeding, and that there is not enough information to establish a "genuine dispute." (NRC Staff, p. 8)

NRC staff misinterpreted and omitted contrary findings relating to state, Basin and federal regulations. ("NRC Staff Response, No. 07-854-01-OLA-BDO1, PPL Susquehanna LLC ("PPL") Proposed Amendment Requests for the Susquehanna Steam Electric Station's 1 & 2 Would Increase Thermal Power to 3,952 Mega-Watts Which is 20% Above the Original Rated Thermal Power (RTP) 3293 MWt, and Approximately 13% Above the Current RTP of 3,489 MWt, Docket Nos. 50-387 PLA-6110 and 50-388, June 5, 2007.) However, the water use, water safety and interagency issues Mr. Epstein raised in the NRC proceeding are **not** addressed in PPL's Application For Surface Water Withdrawal Request to Modify Application 19950301-EPU-0572. Unfortunately, the NRC staff remains steadfast in their opposition to follow-up meetings or conversations with the SRBC to resolve outstanding water use, water safety, and interagency issues.

Moreover, during the Prehearing Conference convened on July 10, 2007, Susan Uttal, Counsel to the NRC, was clear that the staff has **no intention of following up and meeting with the SRBC to resolve these outstanding issues**.

Judge Bollwerk: "This is Judge Bollwerk. Just one question for the staff. Does the staff contemplate or through the process having interactions with the SRBC as this goes forward."

Ms. Uttal: "Not that I'm aware of, Judge." (4)

4 Transcript, p. 54, Lines: 12-16, U.S. Nuclear Regulatory Commission Atomic Safety & Licensing Board Panel, Initial Prehearing Conference In the Matter of the PPL Susquehanna LLC, (Susquehanna Steam Electric Station, Units 1 and 2), Docket Nos. 50-387 and 50-388-OLA, ASLBP No. 07854-01-BD01, July 10 2007: Judge G. Paul Bollwerk, III, Chairman.

The transcript of the July 10, 2007 telephone prehearing conference can be found in the NRC's ADAMS document access system under Accession No. ML071970391.

PPL failed to consider the impact of the proposed uprate on state and federal water use issues, and the potential impact these regulations will have on water flow, water volume and surface water withdrawal for the SSES's cooling systems as well as water safety and numerous state and federal interagency issues.

Absent artificial financial deadlines established by the applicant (5), there is no need to rush approval of PPL's SRBC's application dated December 20, 2006, until all outstanding issues are properly vetted and examined. PPL's financial calculation to factor the "increased generation output into its projected longterm compound annual growth rate of 11% and its 2010 earnings target of \$3.50 per share" (6) should not come at the expense of a through and exhaustive due diligence review by the SRBC.

In short, "PPL Susquehanna, LLC Application for Surface Water Withdrawal Request to Modify Application 19950301-EPU-0572" is fatally flawed based on material **omitted** from its Application and current unresolved violations of SRBC statues. The Susquehanna River Basin Commission cannot allow an Applicant to play a regulatory shell game. The Commission needs to enforce the letter and spirit of its mandated charge and investigate all six of Mr. Epstein's contentions as codified, published, and adopted in the Federal Register/Vol.71, No. 250/Friday, December 29, 2006/Rules and Regulations, "Susquehanna River Basin Commission: 18 CFR Parts 803, 804, 805 et al. Review and Approval of Projects; Special Regulations and Standards; Hearings and Enforcement Actions; Final Rule." In addition, Mr. Epstein respectfully requests the Commission convene a Public Input Hearing Under Subpart A -Conduct of Hearings § 808.1.

6 PPL Press release, October 17, 2006.

<sup>5</sup> A General Electric Co. subsidiary said Sept. 22 that it won a \$10 million contract to increase the electric generating capacity of PPL Corp.'s two-unit Susquehanna nuclear plant by about 200 MW combined. This is part of an extended power uprate for the boiling water reactor units at the nuclear plant, near Berwick . (Generation M A R K E TS W E E K Tuesday 27 September 2005.)

## **II. Contentions**

## Contention 1 : PPL Failed To File A Formal Request with the Susquehanna River Basin Commission for the 2001 Uprate Increase at the SSES.

PPL never received approval from Susquehanna River Basin Commission for the 2001 uprate. (7) (Please refer to Enclosure 1) PPL is currently in violation of SRBC regulations." (8) The Commission has a charge to enforce § 803. 42 and § 803.44 relating to approval and a reporting requirement for surface water withdrawal, and § 806.13 § 806.22-23, § 806. 34, § 806.4, § 806.5, and § 806.6. (9) PPL's existing surface water withdrawal predates the effective date of SRBC 803.44. However, the alteration in water withdrawal from the Susquehanna River and Cowanesque Lake, triggers commission review and approval.

• On April 23, 2001, PPL announced it would petition the NRC to increase the capacity of SSES by 100 megawatts. "The \$120 million of improvements at the Susquehanna plant are expected to add to earnings as soon as they go into operation." (*Reuters*, April 23, 2001)

• July 17, 2001, the NRC approved PPL's capacity expansion request. Unit 1 will be increased this month while the upgrade at Unit 2 is planned for Spring, 2002, after the planned refueling outage. )

8 Published in the Federal Register/Vol.71, No. 250/Friday, December 29, 2006/Rules and Regulations (p. 78581).

9 Mr. Epstein has found no public documents that indicate PPL Susquehanna filed an application for review and received approval from the SRBC. Please refer to Enclosure 1: "PPL Susquehanna, LLC; Susquehanna Steam Electric Station Environmental Assessment and Finding of No Significant Impact [Federal Register: June 25, 2001 (Volume 66, Number 122)] [Notices] [Page 33716-33717] From the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr25jn01-100], NUCLEAR REGULATORY COMMISSION, [Docket Nos. 50-387 and 50-388], PPL Susquehanna, LLC; Susquehanna Steam Electric Station, Environmental Assessment and Finding of No Significant Impact." 5

<sup>&</sup>lt;sup>7</sup> "The proposed license amendment would revise the FOLs and Technical Specifications (TS) of SSES, Units 1 and 2, to allow the licensee to increase the licensed core power level from 3441 MWt to 3489 MWt, which represents a 1.4 percent increase in the allowable thermal power." (Please refer to Enclosure 1)

Yet, in PPL's current application, the Company recognizes the need to file for such a request. PPL's Attorney, Mr. David Lewis stated, that Section 3.1.2.1 of PPL's environmental report "reflects the fact that with uprated conditions we will have to change the approval that we need with respect to the maximum amount of water that we will be consuming. " (NRC Staff, June 5, 2007, p. 12)

Acknowledging the need for a change does not guarantee PPL Susquehanna will receive such approval. PPL's counsel conceded:

"...But I think the gist of what I heard was that PPL will need approval to increase its consumptive water use and approval by the Savannah -- sorry, the Susquehanna River Basin Commission,

And I would submit to you that that is true, but irrelevant. On page 18 of our answer, we cited the Commission's case law that indicated that nuclear plant operations may depend on other state permits that are required for water discharges, and I submit a water consumption is no different.

But it's not the job of the NRC to litigate whether another agency is going to grant permits that are solely within the agency's jurisdiction. If we don't have a permit to withdraw water, then we need -- . Then we would not be able to operate, and there would be no safety issue.

If we do get the permit that we need, we will have the water, and there will be no safety issue. In any event, you know whether we get that permit or not is a matter that is -- will be resolved by the SRBC, and the Commission has indicated the Board should construe the scope of their authority to avoid litigation the issues within the primary responsibility of another agency.

And that while water may be necessary for a nuclear plant to operate, NRC licensing is not dependent on those permits. You know, whether those pe[permits will be obtained will be determined by the agencies that grant those permits." (10)

10 Transcript, p. 34, Lines: 19-25 and p. 35, Lines 1-22., U.S. Nuclear Regulatory Commission Atomic Safety & Licensing Board Panel, Initial Prehearing Conference In the Matter of the PPL Susquehanna LLC, (Susquehanna Steam Electric Station, Units 1 and 2), Docket Nos. 50-387 and 50-388-OLA, ASLBP No. 07854-01-BD01, July 10 2007: Judge G. Paul Bollwerk, III, Chairman.

The transcript of the July 10, 2007 telephone prehearing conference can be found in the NRC's ADAMS document access system under Accession No. ML071970391.

This is a striking admission primarily because PPL never made a similar effort during the 1.4% Measurement Uncertainty Recapture (MUR) uprate in 2001 that was approved by the NRC, yet opted to seek approval for a Stretch Power Uprate (SPU) in 1994, which raised the SSES rated power by 4.5%.

There is no evidence that an application was filed, reviewed or approved by the SRBC in 2001. Furthermore, during the NRC Prehearing Conference convened on July 10, 2007, Mr. Epstein raised the issue of PPL's failure to apply for approval of the 2001 uprate application with the Susquehanna River Basin Commission on **five separate occasions**. (11) The NRC and PPL remained mute, and the Atomic Safety and Licensing Board Panel (ASLBP) failed to investigate the allegation. (12)

1 Transcript, p. 12, Lines: 15-18, p. 13. Lines 19-25, and p. 14 Lines 1-2.

- Transcript, p. 33, Lines: 4-14.
- Transcript, p. 41, Lines: 1-5.
- Transcript, p. 51, Lines: 8-15.
- Transcript, p. 66, Lines: 12-14.

U.S. NRC Atomic Safety & Licensing Board Panel, Initial Prehearing Conference In the Matter of the PPL Susquehanna LLC, (Susquehanna Steam Electric Station, Units 1 and 2), Docket Nos. 50-387 and 50-388-OLA, ASLBP No. 07854-01-BD01, July 10 2007: Judge G. Paul Bollwerk, III, Chairman. The transcript of the July 10, 2007 telephone prehearing conference can be found in the NRC's ADAMS document access system under Accession No. ML071970391.

12 The ASLBP, like PPL and the NRC staff, **completely ignored the issue of PPL's failure to seek and recover permission from the SRBC for the 2001 uprate**. The Panel's only comment was consigned to Page 2, Footnote 1, paragraph 2: "Previously the SSES units each were approved for a SPU (1994) and an MUPU (2001), which raised their rated power by 4.5% and 1.4 percent% respectively."

U.S. NRC Atomic Safety & Licensing Board Panel, Memorandum & Order, In the Matter of the PPL Susquehanna LLC, (Susquehanna Steam Electric Station, Units 1 and 2), Docket Nos. 50-387 and 50-388-OLA, ASLBP No. 07854-01-BD01, July 27, 2007: Judge G. Paul Bollwerk, III, Chairman. Contention 2: Applicable penalties must be assessed and published consistent with PPL's failure to apply and receive necessary approvals for the SRBC. These sanctions should be consistent with Policy No. 92-01, Clarification of Current Consumptive Water Use Regulation, November 19, 1992, and § 808.16 Civil penalty criteria and § 808.11 Civil penalty criteria Federal Register, December 29, 2007.

PPL and the NRC must coordinate with the SRBC and address the 2001 uprate. This "inaction" establishes a deleterious precedent and could constitute *de facto* approval of PPL's original water use permits and impact pending SRBC applications.

For example, the owners and operator of Three Mile island (TMI), Exelon Generating Company, LLC, have filed a Letter of Intent to Apply for License Renewal between January - March 2008. (13) Three Mile Island-1 routinely returns water to the River at temperatures in excess of 110 degrees, and it is not uncommon for the plant to discharge chlorinated water (necessary to minimize bacterial contamination of turbines) or Clamtrol (chemical agent used to defeat Asiatic clam infestation) directly into the River. TMI will also require SRBC approval and has a history of impingement and entrainment problems:

The owners of the Three Mile Island nuclear plant hope they may escape the safer water-intake measures because of the lower amount of water they withdraw, but no determination has been made. "It's been a concern for years," says Leroy Young, chief of aquatic resources for the Pennsylvania Fish and Boat Commission. "The numbers are significant. There are thousands of larger fish (killed) per facility per year. Entrainment rates (referring to organisms sucked into pipes and killed) can be 10 million or more -- mostly floating eggs and larval fish. "Whether it's having a population level effect, I don't think anyone's measured that yet," Young says.

13 US NRC, Three Mile Island, Unit 1 Exelon Generating Company, LLC ML063630037.

14 NEW STEPS TO SAVE RIVER CREATURES, "Feds order Susquehanna power plants and others to stop killing off fish--or replace them," *Intelligencer Journal*, Jan. 15, 2005 The Present Case will inform future nuclear uprate and relicensing requests that will come before the Commission from the Peach Bottom Atomic Power Station, Three Mile Island and the Susquehanna Steam Electric Station as well as Early Site Permits for the construction of new nuclear power generation stations on the Susquehanna River. (15)

The Susquehanna River Basin Commission's 17 point decision (Docket No. 20061209) Approved on December 5, 2006 can inform the and provide direction in the Present Case.

Also, please refer to discussion in Contention 1 and Enclosure 2.

## 15 PPL seeks 3rd nuclear reactor If OK'd, another tower will be built near Berwick *Times Leader*, June 13, 2007

PPL Corp. announced on Wednesday it notified the U.S. Nuclear Regulatory Commission that it plans to apply for a license to construct and operate a third nuclear generator at its Susquehanna River plant near Berwick.

The Allentown-based company also filed a request for an interconnection study with PJM Interconnection, an organization that coordinates the movement of electricity throughout much of the mid-Atlantic region.

PPL is awaiting a license renewal for its two Salem Township nuclear generators, which supply about 25 percent of PPL's total output, and company spokesman Dan McCarthy said a rejection of those renewals could have serious repercussions for the new license.

"If we didn't get them, I don't know that we would go ahead with building the third one," he said.

The company is also considering expansions of hydro and coal plants, he said.

The letter of intent to the NRC lets the company hold a place in the processing line and retain the potential for federal production tax credits and federal loan guarantees, which expire for any application submitted after 2008, according to Jim Miller, PPL chairman, president and chief executive officer.

Contention 3: The SRBC should coordinate with the NRC and address the 2001 and 2006 uprates at the SSES. Lack of regulatory coordination establishes a deleterious precedent,t and could constitute de facto approval of PPL's original water use permits. Failure of the SRBC to initiate and coordinate with the NRC on the 2001 and 2006 uprate could possibly codify regulatory gaps and exasperate safety and health challenges created by power uprates.

Water use and consumption as well as water supply and water chemistry have direct and indirect relationships with safety related components, plant cooling, and are intimately connected to the health and safety of the River and the local community.

PPL credits the spray pond as a safety component but not water withdrawal or surface water consumption. The NRC is concerned with the cooling towers and the makeup systems. However, the NRC's Reactor Oversight Process uses Performance Indicators to track scrams and power changes of 20% or more. Each scram or power change creates a safety challenge. If the SSES has to make **generation reductions** based on compliance with water use restrictions (SRBC § 803.42 and § 803.44 ) or a water budget (consistent with Act 220) (16), and those water conditions cause scrams and/or power reductions, then it is not accurate or factually correct to segregate generation from safety. If PPL has to shut down the plant or reduce power, then alternative systems and backups are also shut or challenged, e.g., Emergency Core Cooling Systems (ECCS) systems.

<sup>16</sup> Act 220 of 2002 mandates that the Department of Environmental Protection update the state water plan by 2008. "The Environmental Quality board will adopt regulations addressing water use registration, period reporting and record keeping (Section 3118), and the DEP is authorized "to enforce the Act." It also "establishes the duty of any person to proceed diligently in complying with orders of the DEP." (Section 3133)

Power generation, cooling and safety are inherently connected. There is no separate imaginary fence between generation and safety. And there should be no regulatory moat created by artificial safety definitions erected by PPL.

Seasonal flow, Act 220, and the competing demands for limited water resources may make the amount of power for generation unreliable. Frequent power decreases and scrams show up as safety indicators and put stress on the SSES. The NRC does not compile generation indicators, it analyzes safety indicators, like scrams and power reductions. The uprate clearly has the potential to create safety challenges by abruptly scramming the plant or forcing power reductions to accommodate a water use budget.

We need to tear down the fictional fence that PPL and the NRC have erected between power generation and safety. Mr. Epstein has established the nexus between safety and generation, and defeated PPL's argument, that "...Mr. Epstein provides no basis to assume that SSES' surface water withdrawals will be restricted or that possibility is material to the licensing." (NRC Staff, NRC-ASLBP), June 5, p.17) However, PPL can not produce any evidence that water use or consumption **will not be restricted**, and PPL acknowledges an "increase in consumptive water use" (PPL, June 5, NRC-ASLBP p. 18) will **be required**. In addition, the SSES may be already out of compliance with the SRBC due to the 2001 uprate.

Consistent with SRBC statute, the Commission, should initiate, coordinate, and execute a MOU with the Nuclear Regulatory Commission to clarify, delineate, and establish mutual zones of interest. (17)

<sup>17</sup> "Timing of SRBC Project Approvals Vis-à-Vis Signatory Approvals," Policy No. 9501, May 11, 1995, and **§ 806.7 Concurrent project review by member jurisdictions** (Federal Register, December 29, 2006, p. 78583.)

Contention 4: The SRBC must investigate the impact of the Environmental Protection Agency' (EPA) 316 (a) and 316 (b) compliance milestones on PPL's present request. PPL has not established compliance milestones for EPA's Act 316 (a) or 316 (b), and their impact on power uprates at the Susquehanna Electric Steam Station, or provided an action plan to defeat site-specific aquatic challenges.

The most current decision relating to 316 (a) and 316 (b) in regard to nuclear power production is the Nuclear Regulatory Commission's reversal of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131 (2006) CLI-07-16, 65 NRC \_\_\_ (Apr 11, 2007)(ADAMS Ascension No. ML071010217).

The 2nd Circuit's Opinion in the Vermont Yankee case is instructive, and focuses on alternative thermal effluent limitations. This specific issue was never raised by Mr. Epstein because the SSES is a closed-cycle plant. The Vermont Yankee decision supports Mr. Epstein's argument that PPL cannot subvert existing state regulations, PPL will have to comply with 316 (a) and 316 (b) regardless of the timing, and the majority decision does nor preclude the application of a site-specific scoping brush from being applied to PPL's surface water withdrawal application.

The 2nd Circuit's Opinion majority option stated:

"We first consider the significance of the three elements of the Section 316(a) permit's status, on which the majority decision relies - the permit's fiveyear duration, its stayed effectiveness, and the pendency of its appeal." The Coalition's argument to this effect constitutes a *de facto* collateral attack on the scope of section 51.53(c)(3)(ii)(B)'s requirement and thereby contravenes our rule prohibiting such attacks on our regulations unless the NRC grants a waiver of the prohibition. Section 51.53(c)(3)(ii)(B) requires merely that an applicant submit the EPA Section 316(a) variance or the equivalent state document. The regulation does not limit this requirement to those situations where the state permit expires within a period greater than five years. Nor could it, because Section 402(b)(1)(B) of the Clean Water Act expressly *prohibits* any state from issuing an NPDES permit for a period longer than five years.

The Court's ruling supports Mr. Epstein's argument that PPL can not subvert or "attack" existing state regulations (Act 220) or federal statues (of the Susquehanna River Basin Commission) or assume compliance based on timing or lack of a firm time frame.

Next, we conclude that the Vermont Environmental Court's stay is irrelevant to the issue now before us. All the stay accomplishes is to reinstate, temporarily, the pre-March 30th version of the permit - an action that does not adversely affect the Coalition's interests (in fact, it favors them). The stay does *not*, as the Coalition would have us believe, render the March 31st permit "wholly superseded," "without any effect," and "a nullity." It merely places that permit in limbo pending the conclusion of the Court's deliberations on the merits of Entergy's thermal increase amendment application. The Coalition thus confuses a stayed permit with a vacated one. (18)

This logic supports Mr. Epstein's argument that a resubmission of the December 20, 2006 Application will not be untimely, and further suggests that this issue will need to be revisited after judicial "limbo." The NRC staff argued, "As a result of the 2nd Circuit's Opinion, the EPA has advised that the rule should be considered suspended. Thus, inherent in this context within the scope of this proceeding, the Licensee is not required to comply with the suspended rule. As such the contention is inadmissible as it has no basis in fact."

<sup>18</sup> Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131 (2006) CLI-07-16, 65 NRC \_\_ (Apr 11, 2007)(ADAMS Ascension No. ML071010217).

This ruling doesn't mean that 316 has disappeared or PPL will not have to be complaint with a federal mandate. Only the timing for compliance has changed. The impact of delay for PPL is negligible since the anticipated project completion date is January 2008, **but** the current licenses do not expire until 2023 and 2025. Absent artificial corporate deadlines, there is no rush to get the SRBC's approval for the uprate prior to the resolution of the status of 316.

And finally, under Commission precedent, the pendency of the appeal to the Vermont Environmental Court and any resulting "uncertainty" as to the permit's status are not relevant here. In Seabrook, we accepted as conclusive the EPA's determinations on aquatic impact, despite the fact that the EPA decision was under judicial review at the time. Moreover, we see no "uncertainty" at all if the Vermont Environmental Court either revokes the permit or does not include the increase when it renews the permit. Under either of those circumstances, the effluent levels would revert to their previous (pre-March 30th) values, rendering the Coalition's contention moot. (19)

Mr. Epstein is not challenging the permit, but seeking to include an evaluation of the uprate on Act 220, SRBC § 803.42 and § 803.44, and the potential of the uprate to harm a fragile, unique and endangered aquatic system that is the Susquehanna River. PPL should not be allowed to "revert" to grandfathered statutes superseded by current and binding SRBC protocols.

Despite an explicit oral argument (20), the Atomic Safety and Licensing Board remained mute. Through default, the NRC accepted the NRC staff's "headin-the-sand" option: "As a result of the 2nd Circuit's Opinion, the EPA has advised that the rule should be considered suspended. Thus, inherent in this context within the scope of this proceeding, the Licensee is not required to comply with the suspended rule. As such the contention is inadmissible as it has no basis in fact."

<sup>19</sup> Transcript, pp. 13-15, U.S. Nuclear Regulatory Commission Atomic Safety & Licensing Board Panel, Initial Prehearing Conference In the Matter of the PPL Susquehanna LLC.

<sup>20</sup> Vermont Yankee Nuclear Power Station, LBP-06-20, 64 NRC 131 (2006) CLI-07-16, 65 NRC \_\_\_ (Apr 11, 2007).

The SRBC must review the impact and timing of PPL's compliance with 316 (a) and 316 (b) based on the impact of the regulation on the Susquehanna River, the duration of the license extension, and PPL's self-imposed haste to seek approval prior to the resolution of EPA's compliance milestones.

While the NRC begs off evaluation of these critical issues, it does not announce how these issues, which are outside of the agency's "scope," (21) should be cured or approached:

Additionally, as the Commission has made apparent in other contexts, see Hydro Resources, CLI-98-16, 48 NRC 119, 121-122, absent some need for resolution to meet the agency's statutory responsibilities, the agency's adujdicatory process is not the forum for litigation matters that are primarily responsible of other federal or state/local agencies.

The NRC is content to let a regulatory wall catch fire in the naive hope that it will not spread to other walls that may (or may not) be its responsibility; while at the same time, acknowledging the potential harm:

To be sure, the EPU request will have implications in terms of increased water consumption, entrainment an impingement, and thermal and liquid effluent discharges, all of which are evaluated in the ER accompanying the PPL application that has not been the subject of Epstein's contentions. (22)

21 Essentially, the NRC's ASLBP ignored most of the substantive issues raised by Mr. Epstein and discounted their merit as being "outside the scope" of an uprate proceeding.

U.S. NRC Atomic Safety & Licensing Board Panel, Memorandum & Order, In the Matter of the PPL Susquehanna LLC, (Susquehanna Steam Electric Station, Units 1 and 2), Docket Nos. 50-387 and 50-388-OLA, ASLBP No. 07854-01-BD01, July 27, 2007: Judge G. Paul Bollwerk, III, Chairman

22 Ibid, p. 22.

But the NRC Staff incorrectly opined, "PPL's excessive use of water is also an issue outside of the NRC's jurisdiction." (Staff, p. 10) However, the Staff, the ASLBP, and PPL ignore a recent ASLBP Memorandum and Order:

Certainly, 511 (c) bars the NRC from reviewing limitations, water quality certification requirements, or other FWPCA requirements. But it does not bar NRC from including water quality matters in the assessment of the environmental impact of the license renewal. To the contrary, NEPA requires the NRC to do so. The required, EIS, including water quality matters, then become a basis for the NRC's ultimate EPA determination of "whether or nor the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decision makers would be unreasonable at the license renewal stage." (23)

Moreover, PPL's ER § § 7.2.1 to 7.24. submitted to the Nuclear Regulatory Commission is a broad scoping brush that does not address Susquehanna River Basin issues, and presumes the complete **nullification** of 316 (a) and 316 (b) as a future event. Mr. Epstein concerns include 316 (a) and 316 (b) issues, but also numerous water challenges caused by the uprate and relicensing of the SSES that fall under the purview of the SRBC. (24)

US NRC, "Memorandum and Order", In the Matter of Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), Docket No. 50-271-LR., ASLBP No. 06-849-03-LR, September 22, 2006, pp. 54-55.)

## 24 Susquehanna River Basin Commission: §801.6 Water supply

(b) The Commission may regulate the withdrawal of waters of the basin not regulated by the signatory parties for domestic, municipal, industrial, and agricultural uses if regulation is considered essential to further the aims set forth in the comprehensive plan.

(c) The Commission shall study the basin's water supply needs, the potential surface and ground water resources, and the interrelationships to meet these needs through existing and new facilities and projects. Efficient use and management of existing facilities with emphasis on the full utilization of known technology will be explored in meeting water supply needs for domestic, municipal, agricultural, and industrial water supply before new programs or projects are approved. PPL's Susquehanna Electric Steam Station plans to increase the volume of surface water it removes from the Susquehanna River regardless of seasonal fluctuations, impending water restrictions, or periods of drought. Communities and ecosystems that depend on these aquatic resources will also be affected, and it is likely more fish and aquatic life will be harmed as a result of the uprate's impact on the River environment. PPL's planned uprate and application for relicensing will further place pressure on already limited water resources.

A snapshot of the amount of water used at nuclear power plants is readily evidenced at PPL's Susquehanna Steam Electric Station (SSES) located on the Susquehanna River in Luzerne County. The plant draws 40.86 million gallons per day from the Susquehanna River. For each unit, 14.93 million gallons per day are lost as vapor out of the cooling tower stack while 11 million gallons per day are returned to the River as cooling tower basin blow down. On average, 29.86 million gallons per day are taken from the Susquehanna River and not returned. This data is public information, and can be easily referenced by reviewing PPL's Pennsylvania Environmental Permit Report.

Water use and consumption by large consumers have an innate and overt relationship with the health and safety of the local community. Most components at the SSES have inherent safety related consequences and are part of the "defense in depth" system deployed by PPL. Water supply and water chemistry are intimately connected to the health and vitality of the River. (25)

25 The Susquehanna Steam Electric Station is a large industrial consumer of a valuable and limited commodity from the Susquehanna River. Freshwater water withdrawals by Americans increased by 8% from 1995-2000, and Americans per capita water withdrawal is three times above the international average, "U.S. National Report on Population and the Environment" (2006) published by the Center for Environment and Population, a nonprofit corporation based in Connecticut.

The Intake is a safety related system that impacts the Susquehanna River (26) regardless of the NRC's restrictive definition of the term "safety."(27) PPL admitted, "the pond requires replenishment from the Susquehanna River." "Consumptive water" use at the SSES results from evaporation from detention basins, thermal loading, along with evaporation and drift losses when the cooling towers are in operation. Assuming the makeup pond requires .36 (366,000) mgd per day, and .065 (65,000) mgd evaporate, than there is at least a 300,000 gpd relationship assuming between the River and the SSES assuming no leakage.

PPL's comments before the NRC defy logic and sound science, unless the Company uses a magical pond that does not suffer from evaporation. As PPL admitted, the pond requires replenishment from the the Susquehanna River. PPL cannot argue that it's consumption has no relationship to plant cooling, the state of the River, ground water supplies and aquatic life. "Consumptive water" use at the SSES results from evaporation from detention basins, thermal loading, along with evaporation and drift losses when the cooling towers are in operation.

26 The Susquehanna River was named America's **Most Endangered River** on April 13, 2005, by American Rivers. As a point of reference, please note that the SSES is located in the "West Branch, Upper, Middle Susquehanna and Chemung River Basins" Region. This area also suffers from **chronic acid mine drainage** runoff. The mines have been abandoned, but their 3,000 miles of underground tunnels -- some of them 5,000 feet below ground -- still cause problems along the Susquehanna River. Water fallout of the Susquehanna River bottom enters and floods the coal tunnels. That fresh water flushes out heavy metals and toxic pollutants. According to Pennsylvania's Susquehanna River Basin Commission, acid mine drainage is the source for more than 70% of the stream impairment in the Middle Susquehanna sub-basin. The Wyoming Valley in the Middle Susquehanna sub basin includes Scranton, Wilkes-Barre, Carbondale and Sunbury.

"...although it provides makeup water to the SSES cooling towers, the Susquehanna River is not a safety-related source of water in the context of this amendment" (Boldface type added). (ASLBP, Memo and Order, p. 21, July 27. 2007) But the NRC required or investigated site-specific aquatic challenges.

DEP confirmed that zebra mussel adults and juveniles have been found in Goodyear Lake, the first major impoundment on the Susquehanna River's main stem below Canadarago Lake in New York. Zebra mussels are an invasive species posing a serious ecological and economic threat to the water resources and water users downstream in the river and Chesapeake Bay. On June 19, 2007, zebra mussels were discovered in Cowanesque Lake, Tioga County. This marks the first time zebra mussels have been discovered in a Pennsylvania waterway in the Susquehanna River watershed. (28) Zebra mussels, like Asiatic clams, shad and other biological fouling, (29) can invade the SSES from the Susquehanna River.

<sup>28</sup> "In 2002, the first report of zebra mussel populations in the Chesapeake Bay Watershed were reported from Eaton Reservoir in the headwaters of the Chenango River, a major tributary to the Susquehanna River in New York. A short time later, zebra mussels also were found in Canadarago Lake, a lake further east in the Susquehanna main stem headwaters. Now, through DEP's Zebra Mussel Monitoring Network, reports were received that both zebra mussel adults and juveniles, called veligers, have made their way down to the Susquehanna main stem headwaters" (Pa DEP, *Update*, July 16, 2004)

Algae blooms recently "caused continuous clogging of multiple strainers of all pumps in TMI the intake structure; including: the two safety related DR pumps, all three safety related NR pumps, and all three non-safety related secondary river pumps." (NRC IR 05000289/2006004, p. 7)

The SSES will require accurate metering to within five percent on the water diverted to the SSES, which can not be achieved if the intake pipes are impaired by residual deposits as identified in PPL's SRBC Application.

The NRC ASLBP took an offhand swipe at these challenges, stating: "The nearest shad ladders are on dams 100 miles below the SSES..." Yet PPL owns two of the dams that shad must hurdle (30), and the NRC is unaware or unconcerned that juvenile shad are released in New York.

The NRC ignored the fact that zebra mussels were recently discovered at PPL' fail-safe water supply in Cowanesque Lake and noted: "There is no evidence zebra mussels have been found in anywhere in the vicinity of the SSES..." But the NRC acknowledges the "SRBC requirement that the SSES compensate consumptive water use during river low-flow conditions by sharing the costs of the Cowanesque Lake Reservoir, which provides river flow augmentation source. (31)

And, according to the NRC, "the Asiatic clam is being controlled with an approved molluscicide in the spray pond, and any chlorine discharge is controlled by the NPDES permit." The NRC's institutional memory failed to account for the incident at Three Mile Island on June 23, 1999 when the plant released too much of a potentially hazardous chemical into the Susquehanna River trying to rid itself of Asiatic clams. "State regulations allow TMI to release 0.3 parts per million of Clamtrol back into the Susquehanna River. For about an hour, the plant was releasing 10,500 gallons per minute containing twice the amount." (*York Daily Record*, July 7, 1999.) Though not a "safety concern " for the NRC, the SRBC may take another view to this potential discharge.

30 Shad passages occur through two of the four hydroelectric dams owned and operated by PPL on the Lower Susquehanna River. These dams are not attracting and funneling shad; especially, at PPL's Holtwood Dam, where a proposed \$275 million expansion is contingent upon PPL solving shad lift problems. While PPL noted that the dams are 100 miles south of the SSES (p. 21), the failed to note that 30% to 50% of the shad stock is wild and migrates north to south. This natural stock is critical since 2002, 2003 and 2004 were bad years for stocked fry. (*Shad run tanks in the Susquehanna* Mike Hendricks, PA Fish and Boat Commission, fisheries biologist, "Pennsylvania Outdoor News")

31 "Memo and Order," July 27, 2007, p. 24, Footnote 20.

PPL's lack of "defense in depth" presumes an isolated and unconnected cooling network: "However, the Susquehanna River is not relied upon as a safety-related source of water for reactor cooling. Rather SSES has an UHS. Thus while a regulatory restriction on surface withdrawals by the SSES might affect generation of electrify, it would not endanger the health and safety of the public." (PPL Response, June 5, 2007, p. 17) Yet, the same company publicly advertises, "Water level in the pond is maintained by adding water from the Susquehanna River as needed." (Ibid.)

The SRBC is not restricted by the artificial limitations and narrow scope the NRC imposed on itself. Mr., Epstein raised 316 (a) and 316 (b) compliance issues as well as site-specific impacts and relations between the Susquehanna River and the Susquehanna Steam Electric Station proposed uprate expansion and relicensing application, which to date, no agency has thoroughly reviewed. Contention 5: The traditional implications of the Pennsylvania Public Utility Commission ("Pa PUC") policy and regulations relating to "withdraw and treatment" of water, i.e., referred to as "cost of water" under the Public Utility Code, Title 66, have to be factored into this application absent a PUC proceeding. "Reasonableness of cost" and permission to charge a rate to any customer class (based on the provision of "reasonable service") has been absented from the SRBC and NRC applications. PPL Susquehanna requires permission to withdraw water, but it also uses public water as a key component in a profit making enterprise.

The Pennsylvania Public Utility Commission's ("PUC") regulates public utilities under Title 66 of the Pennsylvania Consolidated Statutes and regulations found in Title 52 of the Pennsylvania Code. (32)

According to PPL's 10-K filed with the Security and Exchange Commission, "PPL Energy Plus markets or brokers the electricity produced by PPL Generation subsidiaries, along with purchased power, natural gas and oil, in competitive wholesale and deregulated retail markets in order to take advantage of opportunities in the competitive energy marketplace."

"PPL Energy Plus has a PUC license to act as an EGS [Electric Generation Supplier] in Pennsylvania. This license permits PPL Energy Plus to offer retail electric supply to customers throughout Pennsylvania." And, "PPL Susquehanna - PPL Susquehanna, LLC, the nuclear generating subsidiary of PPL Generation." (33)

3.2 PA DEP regulation of public water supplies falls under Chapter 109 of the Pennsylvania Code.

3 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549, Form 10-K and Form 10-K405.

PPL is an Electric Generation Supplier and is subject to Section 2809(e) of the Code which provides:

## (e) Form of regulation of electric generation suppliers.

- [PUC] may forbear from applying requirements of this part[6] which it determines are unnecessary due to competition among electric generation suppliers. In regulating the service of electric generation suppliers, the [PUC] shall impose requirements necessary to ensure that the present quality of service provided by electric utilities does not deteriorate.... 66 Pa. C.S. §2809(e). The "limited purpose" described in section 2809 of the Code is to ensure the present quality of the service provided by electric utilities. To that end, PUC has discretion to apply the requirements of the Code to EGS companies. The words "this part" refer to Part I of Title 66, which is the "Public Utility Code." Here, PUC decided to apply section 510 of the Code, 66 Pa. C.S. §510, to EGS companies. The intent of this section is set forth in subsection (f).

(f) Intent of section. – It is the intent and purpose of this section that each public utility subject to this part [i.e., the Code] shall advance to [PUC] its reasonable share of the cost of administering this part....66 Pa. C.S. §510(f)

The Commonwealth Court found that "EGS companies are 'public utilities' for the limited purposes described in sections 2809 and 2810 of the Code. Thus, EGS companies are public utilities "subject to [the Code]. This means that PUC did not err by assessing PPL under section 510 of the Code." (34)

Section 504 of the Public Utility Code, 66 PA C.S. provides that:

The Commission may require any public utility to file periodical reports, at such time, and in such forms, and of such content, as the Commission may prescribe, and special reports concerning any matter whatsoever about which the Commission is authorized to inquire, or keep itself informed, or which it is required to enforce. The Commission may require any public utility to file with it a copy of any report filed by such public utility with any Federal Department or regulatory body. All reports shall be under oath or affirmation when required by the Commission."

34 PPL Energy Plus, LLC (Petitioner) v. Commonwealth of Pennsylvania (Respondent), No. 525 M.D. 2001, Order: June 6, 2002, p.5.

Chapter 33 of the Public Utility Code, 66 PA C.S. §3301 (a) under "Civil Penalties for Violations" provides, in part, as follows:

"(a) If any public utility, \*\*\*\* shall fail, omit, neglect or refuse to obey, observe, and comply with any regulation or final direction, requirement, determination, or order made by the Commission, \*\*\*\* such public utility person or corporation for such violation, omission, failure, neglect, or refusal shall forfeit and pay to the Commonwealth a sum not exceeding \$1000\*\*\*."

The SRBC should initiate, coordinate, and execute a MOU with the Pennsylvania Public Utility Commission to clarify, delineate and establish mutual zones of interest relating to water use, fee assessments, and reporting requirements for PPL Susquehanna. (35)

<sup>35 &</sup>quot;Timing of SRBC Project Approvals Vis-à-Vis Signatory Approvals," Policy No. 9501, May 11, 1995, and § 806.7 Concurrent project review by member jurisdictions (Federal Register, December 29, 2006, p. 78583.)

Contention 6: The SRBC must examine the impact of possible water budget enacted by Act 220 on PPL's 2006 uprate request. Act 220 of 2002 mandates that the Department of Environmental Protection update the state water plan by 2008. "The Environmental Quality board will adopt regulations addressing water use registration, period reporting and record keeping (Section 3118), and the DEP is authorized "to enforce the Act." It also "establishes the duty of any person to proceed diligently in complying with orders of the DEP." (Section 3133)

The Susquehanna River Basin Commission is charged with reviewing the content of contention 6 based on Subpart A - General Provisions § 806.1 § 806.2 § 806.3 § 806.4 and § 806.7, Subpart -B Applicant Procedure § 806.14, and Subpart C Standards for Review and Approval § 806.21, § 806.22§ 806.23, § 806.24 and § 806.25 (Federal Register, December 29, 2006, pp. 78578-89.)

NRC staff alleges that T-1 was "outside of the scope" and "not material" to the NRC proceeding, and that there was "not enough information to establish a "genuine dispute." Furthermore, the NRC erroneously alleged that "vague data" and references to "anticipated enactment of state regulations" do not provide sufficient information. (NRC Staff, p. 8) Staff misinterpreted and omitted contrary findings relating to state, Basin and federal regulations, and created a specious syllogism by stating, "Petitioner offers no support for his assertion that PPL must anticipate a future a law..." (Staff, p. 10.) The ASLBP agreed and spent nine pages saying why the above identified issues were outside the scope of the NRC's proceeding. ("NRC Memo and Order", July 27, 2007 pp. 21-30)

Act 220 of 2002 is the law, and mandates that the Department of Environmental Protection update the state water plan by 2008. "The Environmental Quality Board (EQB) will adopt regulations addressing water use registration, period reporting and record keeping (Section 3118), and the DEP is authorized to enforce the Act. The Act "establishes the duty of any person to proceed diligently in compiling with orders of the DEP." (Section 3133) Had PPL Susquehanna staff scratched the regulatory surface in their uprate application and review, they would have disclosed the need to coordinate, and perhaps submit an "alternative plan" as a result of Act 220. (28) The Company simply failed to include this data in their application.

In March 2008, areas will be identified where water use exceeds (or is projected to exceed) available supplies. (36) If the SSES is designated as an endangered or sensitive area, PPL will have to comply with a "water budget" established by the Regional Water Resource Committee and the Critical Advisory Committee and codified by the EQB.

New or increased withdrawals of 10,000 bgd trigger a review and permit process from the Susquehanna River Basin Commission. PPL must also demonstrate that their proposed withdrawals will not significantly impair or reduce the flow of perennial streams in the area," (18 CFR § 430.13 (d) (4)), and the Company must now comply with drought restrictions. (SRBC Compact § 11.4.) In fact, PPL Susquehanna acknowledged: "Water from the Susquehanna River makes up for cooling water lost to evaporation." (37)

The US EPA and Army Corps of Engineers issued new guidelines fort the protection of wetlands and bodies of water under the Clean Water Act on June 6, 2007. This is **an "unanticipated future"** regulatory guideline promulgated after the uprate amendment was filed by PPL. While the problem of hypoxia is critical, Mr. Epstein did not suggest that this issue had to be revisited after PPL filed its amendment request.

3 7 PPL, Susquehanna Nuclear Energy Guide, www.pplweb.com, June 11, 2007 p. 13.

<sup>36</sup> Act 220 of 2002 mandates that the Department of Environmental Protection update the state water plan by 2008. "The Environmental Quality board will adopt regulations addressing water use registration, period reporting and record keeping (Section 3118), and the DEP is authorized "to enforce the Act. It also "establishes the duty of any person to proceed diligently in compiling with orders of the DEP." (Section 3133)

## **III. Remedies:**

The Susquehanna River Basin Commission should take the following actions based on Mr. Epstein's Petition in Opposition to PPL Susquehanna, LLC Application for Surface Water Withdrawal Request to Modify Application 19950301-EPU-0572:

1) Convene a Public Input Hearing Under Subpart A - Conduct of Hearings § 808.1;

2) Hold PPL's application in abeyance until all of Mr. Epstein contentions are reviewed by the SRBC:

• Contention 1: PPL never received approval from Susquehanna River Basin Commission for the 2001 uprate. PPL is currently in violation of SRBC regulations." The Commission has a charge to enforce § 803. 42 and § 803.44 relating to approval and a reporting requirement for surface water withdrawal, and § 806.13, § 806.22-23, § 806. 34, § 806.4, § 806.5, and § 806.6. (9) PPL's existing surface water withdrawal predates the effective date of SRBC 803.44. However the increase in water withdrawal from the River and Cowanesque Lake, triggers commission review and approval;

• Contention 2: Applicable penalties must be assessed and published consistent with PPL's failure to apply and receive necessary approvals for the SRBC. These sanctions should be consistent with Policy No. 92-01, Clarification of Current Consumptive Water Use Regulation, November 19, 1992, and § 808.16 Civil penalty criteria and § 808.11 Civil penalty criteria Federal Register, December 29, 2007;

• Contention 3: The SRBC should coordinate with the NRC and address the 2001 and 2006 uprates. Lack of regulatory coordination establishes a deleterious precedent, and could constitute *de facto* approval of PPL's original water use permits. Failure of the SRBC to initiate and coordinate with the NRC on the 2001 and 2006 uprate could possibly codify regulatory gaps and exasperate safety and health challenges created by the uprates;

• Contention 4: The SRBC must investigate the impact of the Environmental Protection Agency' (EPA) 316 (a) and 316 (b) compliance milestones on PPL's present request. PPL has not established compliance milestones for EPA's Act 316 (a) or 316 (b), and their impact on power uprates at the Susquehanna Electric Steam Station, or provided an action plan to defeat site-specific aquatic challenges;

• Contention 5: The traditional implications of the Pennsylvania Public Utility Commission policy and regulations relating to "withdraw and treatment" of water, i.e., referred to as "cost of water" under the Public Utility Code, Title 66, have to be factored into this application absent a PUC proceeding. "Reasonableness of cost" and permission to charge a rate to any customer class (based on the provision of "reasonable service") has been absented from the SRBC and NRC applications. PPL Susquehanna requires permission to withdraw water, but it also uses public water as a key component in a profit making enterprise;

• Contention 6: The SRBC must examine the impact of possible water budget enacted by Act 220 on PPL's 2006 uprate request. Act 220 of 2002 mandates that the Department of Environmental Protection update the state water plan by 2008. "The Environmental Quality board will adopt regulations addressing water use registration, period reporting and record keeping (Section 3118), and the DEP is authorized "to enforce the Act." It also "establishes the duty of any person to proceed diligently in complying with orders of the DEP." (Section 3133)

3) In regard to PPL's 2001 uprate, the SRBC should use its authority in § 806.32 Reopening/Modification (a)(b)(c) & (d), to investigate this matter;

4) Issue a Notice of Violation and assess noncompliance findings and penalties consistent with § 808.16 Civil penalty criteria and § 808.17 Enforcement of penalties, abatement or remedial orders; 5) PPL will need to provide an action plan or water amendment in the event the proposed uprate creates competing water demands in "water budgeted" areas. Mr. Epstein is seeking to include an evaluation of the 2006 uprate on Act 220, SRBC § 803.42 and § 803.44, and the potential of the uprate to harm a fragile, unique and endangered aquatic system that is the Susquehanna River; and,

6) The SRBC should condition PPL's application on water conservation measures delineated under § 806. 25 (b).

Respectfully submitted,

Eric Joseph Epstein, *Pro se* 4100 Hillsdale Road Harrisburg, PA 17112 ENCLOSURE 1

# PPL Susquehanna, LLC; Susquehanna Steam Electric Station Environmental Assessment and Finding of No Significant Impact

[Federal Register: June 25, 2001 (Volume 66, Number 122)]
[Notices]
[Page 33716-33717]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
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NUCLEAR REGULATORY COMMISSION [Docket Nos. 50-387 and 50-388]

PPL Susquehanna, LLC; Susquehanna Steam Electric Station Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of amendments to Facility Operating License (FOL) Nos. NPF-14, and NPF-22, issued to PPL Susquehanna, LLC (the licensee), for operation of the Susquehanna Steam Electric Station (SSES), Units 1 and 2, located in Luzerne County, Pennsylvania.

Environmental Assessment

Identification of the Proposed Action

The proposed license amendment would revise the FOLs and Technical Specifications (TS) of SSES, Units 1 and 2, to allow the licensee to increase the licensed core power level from 3441 MWt to 3489 MWt, which represents a 1.4 percent increase in the allowable thermal power. SSES Unit 1 was granted conditional authorization for power production by its FOL issued on July 17, 1982. Full power operation of Unit 1 at 3,293 MWt core power was authorized by Amendment No. 5 to the FOL, issued on November 12, 1982. Amendment No. 143 to the FOL, issued on March 22, 1995, authorized a power uprate for Unit 1 to 3,441 MWt. SSES Unit 2 was granted conditional authorization for power production by its FOL issued on March 23, 1984. Full power operation of Unit 2 at 3,293 MWt core power was authorized by Amendment No. 1 to the FOL, issued on June 27, 1984. Amendment No. 103 to the FOL, issued on April 11, 1994, authorized a power uprate for Unit 2 to 3,441 MWt.

The proposed action is in accordance with the licensee's application for license amendment dated October 30, 2000, as supplemented by letters dated February 5, May 22, and May 31, 2001.

The Need for the Proposed Action

The proposed action would allow an increase in power generation at SSES, Units 1 and 2, to provide additional electrical power for distribution to the grid. Power uprate has been widely recognized by the industry as a safe and cost-effective method to increase generating capacity.

#### Environmental Impacts of the Proposed Action

The environmental impact associated with operation of SSES, Units 1 and 2, has been previously evaluated by the U.S. Atomic Energy Commission in the `Final Environmental Statement Related to Operation of Susquehanna Steam Electric Station, Units 1 and 2,'' dated June 1981. In this evaluation, the staff considered the potential doses due to postulated accidents for the site, at the site boundary, and to the population within 50 miles of the site. With regard to consequences of postulated accidents, the licensee has reevaluated the current design basis accidents (DBAs) in its application for license amendments and determined that accident source terms are based on core power levels that bound the proposed core power level of 3489 MWt. Therefore, the current analyses bound the potential doses due to DBAs based on the proposed 1.4 percent increased core power level. No increase in the probability of these accidents is expected to occur.

With regard to normal releases, the licensee has calculated the potential impact on the radiological effluents from the proposed 1.4 percent increase in power level. The licensee concluded that the offsite doses from normal effluent releases remain significantly below the bounding limits of Title 10 of the Code of Federal Regulations (10 CFR), Part 50, Appendix I. Normal annual average gaseous releases remain limited to a small fraction of 10 CFR Part 20, Appendix B, Table 2 limits. The licensee evaluated the effects of power uprate on the radiation sources within the plant and the radiation levels during normal operating conditions. Post-operation radiation levels are expected to increase slightly due to the power uprate; but are expected to have no significant effect on the plant. Occupational doses for normal operations will be maintained within acceptable limits by the site ALARA (as-low-as-reasonably-acheivable) program. Solid and liquid waste production may increase slightly as a result of the proposed 1.4 percent uprate; however, waste processing systems are expected to operate within their design requirements.

The NRC has completed its evaluation of the proposed action and concludes that the proposed action will not increase the probability or consequences of accidents, no changes are being made in the types of effluents that may be released offsite, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential non-radiological impacts, the proposed action does not involve any historic

#### [[Page 33717]]

sites. With regard to thermal discharges to the Susquehanna River, the staff has previously evaluated temperature effects during normal operations at full power and determined the temperature impact on the river to be insignificant. The licensee indicated that an increase in the cooling tower air flow rate will compensate for the slight increase in condenser outlet circulating water temperature, such that no perceptible change in the temperature of the cooling tower basin blowdown to the Susquehanna River is expected. Therefore, the temperature effects on the river will be insignificant. Existing administrative controls ensure the conduct of adequate monitoring such that appropriate actions can be taken to preclude exceeding the limits imposed by the National Pollution Discharge Elimination System permit. No additional requirements or other changes are required as a result of the power uprate. No other non-radiological impacts are associated with the proposed action.

Based upon the above, the NRC concludes that the proposed action does not affect non-radiological plant effluents and has no other environmental impact. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

#### Alternatives to the Proposed Action

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the ``no-action'' alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

#### Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the. SSES, Units 1 and 2.

#### Agencies and Persons Consulted

In accordance with its stated policy, on June 19, 2001, the staff consulted with the Pennsylvania State official, Mr. Michael Murphy of the Pennsylvania Department of Environmental Protection, regarding the environmental impact of the proposed action. The State official had no comments.

#### Finding of No Significant Impact

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated October 30, 2000, as supplemented by letters dated February 5, May 22, and May 31, 2001. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Agencywide Documents Access and Management Systems (ADAMS) Public Electronic Reading Room on the Internet at the NRC web site, <u>http://www.nrc.gov/NRC/ADAMS/index.html</u>. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737 or by e-mail to pdr@nrc.gov.

Dated at Rockville, Maryland, this 19th day of June 2001.

For the Nuclear Regulatory Commission. Richard P. Correia, Acting Chief, Section 1, Project Directorate I, Division of Licensing Project Management, Office of Nuclear Reactor Regulation. [FR Doc. 01-15815 Filed 6-22-01; 8:45 am] BILLING CODE 7590-01-P

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Last updated on Thursday, February 23rd, 2006 URL: http://www.epa.gov/fedrgstr/EPA-IMPACT/2001/June/Day-25/i15815.htm ENCLOSURE 2



## SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391 Phone (717) 238-0423 • Fax (717) 238-2436 Web http://www.srbc.net

Docket No. 20061209 Approval Date: December 05, 2006

## EXELON GENERATION CO. LLC— PEACH BOTTOM ATOMIC POWER STATION

Surface Water Withdrawal of up to 2,363.620 mgd, from Conowingo Reservoir, Drumore Township, Lancaster County, Pennsylvania, and Consumptive Water Use of up to 32.490 mgd (Peak Day) for Power Plant Operation at the Peach Bottom Atomic Power Station, Drumore Township, Lancaster County, and Peach Bottom 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) Regulations §803.4, relating to projects requiring review and approval; §803.42, relating to the consumptive use of water; and §803.44, relating to surface water withdrawals. The Commission received the surface water withdrawal and consumptive water use application on October 3, 2006.

## 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 Peach Bottom Atomic Power Station (PBAPS).

Location. The project is located in the Susquehanna Subbasin, HUC 02050306, Drumore Township, Lancaster County, and Peach Bottom Township, York County, Pennsylvania.

**Project Features.** The project sponsor has requested approval for continued consumptive water use of up to 32.490 million gallons per day (mgd) on a peak day. The project sponsor has also requested approval for a surface water withdrawal of up to 2,363.620 mgd (peak day) from Conowingo Reservoir.

The project consists of two nuclear-powered, base-load electric generating units known as Unit 2 and Unit 3. Unit 2 is rated at 1,112 megawatts, and Unit 3 is rated at 1,112 megawatts. Units 2 and 3 at PBAPS began operation in July and December 1974, respectively, and have

open-cycle cooling systems with evaporative cooling towers that are used intermittently depending on metrological and reservoir conditions. PBAPS is approved by the Commission to consumptively use water in accordance with Resolution 93-04. Consumptive water use at PBAPS results from evaporation from detention basins, thermal loading on the reservoir surface, along with evaporation and drift losses when the cooling towers are in operation. Under the terms of Resolution 93-04, adopted by the Commission on September 16, 1993, the consumptive water use compensation provided by PBAPS through releases at the Conowingo Dam was determined to satisfy the Commission's compensation requirement for the existing operation.

Currently, consumptive water use makeup, as approved under Resolution 93-04, is provided by a release of water at the Conowingo Dam whenever streamflow at the Marietta gage is less than 2,700 cubic feet per second (cfs), such that the average daily streamflow measured at the Conowingo stream gage is always equal to or greater than the average daily streamflow measured at the Marietta gage plus 200 cfs. This compliance method applies to full or partial operation of the PBAPS, but not when both Units are shut down.

PBAPS received approval from the U.S. Nuclear Regulatory Commission (NRC) to uprate Unit 2 in 1994 and 2002, and Unit 3 in 1995 and 2002. In 2003, Exelon Generation Co., LLC (Exelon) received a license renewal from NRC extending the term of the licenses 20 years to 2033 (Unit 2) and 2034 (Unit 3).

## Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulations §803.42 and §803.44.

Prior to the approval of this docket, the project has been subject to Commission Resolutions 81-07, 83-04, 91-02, and 93-04. The Commission-approved method of compliance for the consumptive use of water at PBAPS is contained within Resolution 93-04. Because Resolution 93-04 predates the Commission's surface water withdrawal regulation, it contains no provisions or conditions related to surface water withdrawal.

The project sponsor identified that the surface water withdrawal at the facility will be increased sufficiently to be subject to Commission Regulation §803.44, relating to surface water withdrawals. The project sponsor has requested approval for the surface water withdrawal of up to 2,363.620 mgd from Conowingo Reservoir.

All water: 1) evaporated or otherwise lost from the cooling system or other power generation processes; and 2) evaporated off the surface of Conowingo Reservoir due to thermal loading, is considered to be a consumptive water use subject to Commission regulation.

Commission staff recommends that the project sponsor 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 Conowingo Reservoir for review and approval by Commission staff. The plan should contain metering that is accurate to within five 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 Conowingo Reservoir. 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 PBAPS's consumptive water use and total water withdrawal from Conowingo Reservoir, 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.

The project's consumptive use of water is subject to water compensation requirements, as per Commission Regulation §803.42. To satisfy these requirements, the project sponsor proposes to continue utilizing the compliance method first approved in Resolution 93-04, effective until September 16, 2011, and thereafter to utilize a method to be approved by the Commission. For so long as Exelon uses releases of water storage from the Conowingo Reservoir as its method for mitigating consumptive water use at PBAPS, if there is any noncompliance with the release requirement related thereto, Exelon proposes to make payments to the Commission in lieu of providing actual compensation water.

Commission staff recommends approval of the proposed consumptive water use method. Commission staff recommends Exelon submit a docket modification request on or before September 16, 2010, proposing a method to mitigate for consumptive water use at PBAPS for the remaining term of its NRC license after the existing compensation agreement expires. In the event it fails to do so, Commission staff recommends that the approved method of compliance after September 16, 2011, be payment of the Commission's prevailing use fee.

The existing surface water withdrawal predates the effective date of Commission Regulation §803.44; however, the project sponsor's increase in withdrawal from Conowingo Reservoir triggers Commission review and approval.

Commission staff recommends approval of the requested surface water withdrawal of up to 2,363.620 mgd (peak day), as submitted by the project sponsor.

Commission staff contends that the project sponsor, at times, operated PBAPS inconsistent with Commission regulations since August 1999, when its surface water withdrawal exceeded the regulation threshold. Commission staff also contends that the project sponsor did not fully comply with its consumptive use mitigation requirements as set forth in Resolution 93-04. The project sponsor voluntarily submitted its application to the Commission, complied with application procedures, and cooperated with Commission staff during its review of the project. The project sponsor has offered a settlement to the Commission for these matters. 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 §803.28, and in accordance with Commission Resolution 2005-03. 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.

Commission staff recommends the term of this docket modification to be coterminous with the Unit 3 NRC license, effective until July 3, 2034.

## Decision

1. The project's surface water withdrawal from Conowingo Reservoir of up to 2,363.620 mgd, and consumptive water use of up to 32.490 mgd (peak day), 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, as per Commission Regulations §803.42 and §803.44.

4. The project sponsor shall keep daily records of the consumptive water use and surface water withdrawal, and shall report the data to the Commission quarterly, and as otherwise required. Quarterly monitoring reports are due within thirty (30) days after the close of the preceding quarter.

5. The project sponsor's Settlement Agreement, pursuant to Commission Regulation §805.27, for alleged noncompliance with Commission regulations and consumptive use mitigation requirements as set forth in Resolution 93-04, is hereby accepted.

6. Within sixty (60) days from the date of this approval, the project sponsor shall submit to the Commission for review and approval by Commission staff a plan to meter or use other suitable methods of measuring surface water withdrawals that account for all water withdrawn from Conowingo Reservoir, the wastewater and thermal discharge, and the total consumptive water use at the PBAPS 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, and shall certify to the Commission that the monitoring plan has been implemented.

7. To satisfy the Commission's current compensation requirements for consumptive water use set forth in Commission Regulation §803.42, the project sponsor shall release water at the Conowingo Dam whenever streamflow at the Marietta gage is less than 2,700 cfs, such that the average daily streamflow measured at the Conowingo stream gage is always equal to or

greater than the average daily streamflow measured at the Marietta gage plus 200 cfs. This compliance method applies to full or partial operation of the PBAPS, but not when the plant is shut down and is effective until September 16, 2011. Thereafter, its method of compliance shall be as set forth below. If there is any noncompliance with the release requirement from the Conowingo Reservoir, Exelon shall pay the Commission a consumptive use fee for the entire calendar year in which the violation occurred, based on the applicable Commission rate (currently \$0.14 per 1,000 gallons), for the facility's actual total consumptive use for such calendar year, as its alternate method of mitigation for that year. 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. On or before September 16, 2010, Exelon shall submit a docket modification request proposing a method to mitigate for consumptive use at the facility for the remaining term of its docket after September 16, 2011. The proposed method may be a modification of, or alternative to, the mitigation method described in Condition 7 above.

9. Should Exelon not submit a modification request to the Commission pursuant to Docket Condition 7 above, the payment of the Commission's prevailing consumptive use fee shall be the method for meeting PBAPS's consumptive use mitigation requirement for the remaining term of its Docket after September 16, 2011.

10. All prior approvals issued by the Commission for PBAPS are hereby superseded by this approval, to the extent inconsistent with this approval.

11. 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.

12. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, subject to applicable NRC regulations, to have access to and to inspect all areas where the project is being constructed, operated, or maintained. Such employees or agents shall be authorized to conduct tests or sampling; to take photographs; to perform measurements, surveys, and other tests; to inspect the methods of construction, operation, or maintenance; to inspect all measurement equipment; to audit, examine, and copy books, papers, and records pertinent to any matter under investigation; and to take any other action necessary to assure that the project is constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.

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 Commission may suspend, modify, or revoke its approval of same, and may impose appropriate penalties.

Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, nor shall it preclude the Commission from imposing penalties for such noncompliance.

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 July 3, 2034. The project sponsor shall submit a renewal application by January 3, 2034, and obtain Commission approval prior to continuing operation beyond July 3, 2034.

17. 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: December 5, 2006

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Kenneth P. Lynch, Chair New York Commissioner