

February 5, 2007

**United States of America  
Nuclear Regulatory Commission**

**Before the Atomic Safety and Licensing Board**

In the Matter of ) Docket Nos. 50-387-LR  
PPL Susquehanna, LLC ) 50-388-LR  
Susquehanna Steam Electric Station, ) ASLBP No. 07-851-01-LR  
Units 1 and 2 )

Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Mail Stop O-16 C1  
Washington, D.C. 20555-0001  
Attn: Rulemaking and Adjudications Staff

DOCKETED  
USNRC

February 5, 2007 (3:59pm)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Office of the Secretary  
U.S. Nuclear Regulatory Commission  
One White Flint North, 16th Floor  
11555 Rockville Pike,  
Rockville, Maryland 20852  
Attn: Rulemaking and Adjudications Staff

Eric Joseph Epstein's Response to PPL Susquehanna's Answer to Eric Joseph Epstein's Petition to Intervene and Eric Joseph Epstein's Response to the NRC Staff's Response to Eric Joseph Epstein's Petition for leave to Intervene, Request for hearing, and Contentions Re: PPL Susquehanna LLC Application for Susquehanna Steam Electric Station's Renewed Operating Licenses NPF-14 and NPF-22 Docket Nos. 50-387 PLA-6110 and 50-388

TEMPLATE= SECY-037

SECY-02

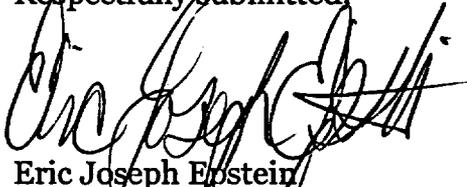
February 5, 2007

Dear Sir or Madam:

Enclosed please find Eric Joseph Epstein's Response to PPL Susquehanna's Answer to Eric Joseph Epstein's Petition to Intervene and Eric Joseph Epstein's Response the NRC Staff's Response to Eric Joseph Epstein's Petition for leave to Intervene, Request for Hearing, and Contentions Re: PPL Susquehanna LLC Application for Susquehanna Steam Electric Station's Renewed Operating Licenses, NPF-14 and NPF-22 Docket Nos. 50-387 PLA-6110 and 50-388.

Thank you for your attention to this matter.

Respectfully submitted,



Eric Joseph Epstein  
4100 Hillsdale Road  
Harrisburg, PA 17112  
(717)-541-1101 Phone

**Enclosures:**  
Certificate of Service  
Exhibits #1-#8

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**I. Introduction**

Eric Joseph Epstein (“Mr. Epstein” or “Epstein”), pursuant to 10 C.F.R. § 2.309 (d) and (e) and (h) (1), Mr. Epstein’s reaffirms his rights to petition to intervene in the proceeding in response to the Notice of Opportunity for a Hearing and Notice of Intent to Prepare an Environmental Impact Statement and Conduct a Scoping Process as published in the Federal Register on November 2, 2006, (71 FR 64566), and concerning the application of PPL Susquehanna to renew its operating licenses for the Susquehanna Steam Electric Stations (the “SSES” or “Susquehanna” or “the Company” or “the applicant”) Unit 1 and 2 for an additional 20 years beyond the current expiration dates on July 17, 2022 and March 23, 2024.

Mr. Epstein also reaffirms his request for a hearing consistent with 10 C.F.R. § 2.309(a). Pursuant to 10 C.F.R. § 2.309(o), Mr. Epstein should be granted leave to intervene because he has standing; and, hereby submits five admissible contentions.

For the reasons set forth below, Mr. Epstein respectfully requests that PPL Susquehanna's Answer to Eric Joseph Epstein's Petition to Intervene, and the NRC Staff's Response to Eric Joseph Epstein's Petition for leave to Intervene, Request for Hearing, and Contentions be rejected in their entirety. (1)

In addition, based on PPL and the NRC staff's objections to Mr. Epstein's requests, Eric Joseph Epstein formally requests the opportunity to make an oral presentation before the entire Atomic Safety and Licensing Board.

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<sup>1</sup> On February 5, 2007, Eric Joseph Epstein filed a Motion to Compel PPL Susquehanna, LLC to: (1) Apply for a Direct License Transfer (Or Incorporate Modifications from an NRC Approved Transfer Into The Relicensing Application) Prior to the Issuance of a Relicensing Application for the Susquehanna Steam Electric Station; and, (2) Request and Receive a Scheduling Exemption to Proceed With a Premature Relicensing Application for the Susquehanna Steam Electric Station.

The Motion offers three remedies relevant to the Present Proceeding:

1) PPL Susquehanna must formally request a direct license transfer proceeding in accordance with Section 184 of the Atomic Energy Act, and 10 C.F.R. § 50.80, and obtain permission from the NRC, after public comment, to transfer PPL Electric's 90% interests in the SSES to PPL Susquehanna, LLC.

2) After PPL Susquehanna has applied and received permission to operate the SSES, then the Company must necessarily file a Scheduling Exemption prior to apply for licensing renewal under Title 10 of the Code of Federal Regulations (10 CFR), Part 54.17(c) stipulates that an application for a renewed license may not be submitted to the Commission earlier than 20 years before the expiration of the operating license currently in effect.

3) The NRC must determine if PPL Susquehanna is currently an "electric utility" under NRC statutes.

## **II. History of Proceeding**

PPL's application for renewal was received by the Nuclear Regulatory Commission ("NRC" or "Commission") on September 13, 2006, pursuant to 10 CFR Part 54. A notice of Receipt and Availability of the license renewal application (LRA), was published in the Federal Register on October 2, 2006 (71 FR 58014). A notice of acceptability for docketing, notice of opportunity for a hearing and notice of intent to prepare an environmental impact statement and conduct scoping process was published in the Federal Register on November 2, 2006 (71 FR 64566).

A subsequent "Correction" was published in the Federal Register on December 21, 2006 (FR Doc E6-21807 [Federal Register: December 21, 2006 (Volume 71, Number 245)] [Notices] [Page 76706] From the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID: fr21de06-103]).

The comment Period for the Environmental Impact Statement for the License Renewal of Susquehanna Steam Electric Station (The "SSES" or "Susquehanna"), owned and operated by PPL Susquehanna ("PPL") Units 1 and 2 Notice was given that the U.S. Nuclear Regulatory Commission has corrected the public scoping comment period for the plant-specific supplement to the "Generic Environmental Impact Statement (GEIS)," NUREG-1437, regarding the renewal of operating licenses NPF-14 and NPF-22 for an additional 20 years of operation at the Susquehanna Steam Electric Station (SSES), Units 1 and 2.

Mr. Epstein submitted comments in Berwick, Pennsylvania on November 15, 2006 on behalf of Three Mile Island Alert, Inc. (TMIA) opposing PPL's premature request to relicense the Susquehanna Steam Electric Station (SSES) to operate for 20 more years. PPL has applied to the Nuclear Regulatory Commission (NRC) for permission to run the Susquehanna Steam Electric Station until 2043 [Unit-1] and 2045 [Unit-2].

On January 2, 2007, Eric Joseph Epstein (“Mr. Epstein” or “Epstein”), pursuant to 10 C.F.R. § 2.309 (d) and (e), petitioned to intervene in the proceeding in response to the Notice of Opportunity for a Hearing and Notice of Intent to Prepare an Environmental Impact Statement and Conduct a Scoping Process as published in the Federal Register on November 2, 2006, (71 FR 64566), and concerning the application of PPL Susquehanna to renew its operating licenses for the Susquehanna Steam Electric Stations (“SSES” or “Susquehanna” or “the Company” or “the applicant”) Unit 1 and 2 for an additional 20 years beyond the current expiration dates on July 17, 2022 and March 23, 2024. Mr. Epstein also requested a hearing consistent with 10 C.F.R. § 2.309(a). Pursuant to 10 C.F.R. § 2.309(o), and leave to intervene.

On January 23, 2007 the NRC’s Atomic Safety and Licensing Board (“ASL&B”) issued an Order relating to the schedule and guidance for proceedings in the Present proceeding.

On January 29, 2007, PPL Susquehanna’s filed an Answer to Eric Joseph Epstein’s Petition to Intervene, and the NRC Staff Responded to Eric Joseph Epstein’s Petition for Leave to Intervene, Request for Hearing, and Contentions Re: PPL Susquehanna LLC Application for Susquehanna Steam Electric Station’s Renewed Operating Licenses, NPF-14 and NPF-22 Docket Nos. 50-387 PLA-6110 and 50-388.

And, on January 31, 2007, Mr. Epstein advised all Active Parties, through a Notice of Related Filing by Three Mile Island Alert Incorporated, of Eric Joseph Epstein’s comments submitted on January 13, 2007, on behalf of Three Mile Island Alert, Incorporated, in support of the Massachusetts Attorney General’s Petition for Rulemaking RE: Docket No. PRM-51-10, with the Secretary of U.S. Nuclear Regulatory Commission (NRC) Rulemakings and Adjudications Staff.

### **III. Standing**

#### ***A. Eric Joseph Epstein Has Standing***

Mr. Epstein meets the criteria of standing on his own behalf and on behalf of the members of Three Mile Island Alert, Inc., and has achieved status as an expert witness on nuclear issues before the Pennsylvania Public Utility Commission. Rather than restate and repost the arguments offered in his January 2, 2007, filing, Mr. Epstein will review his argument for standing while addressing the elements the NRC staff and PPL believe are missing from his original argument.

The standing requirements for Nuclear Regulatory Commission (NRC) adjudicatory proceedings derive from the Atomic Energy Act (AEA), which requires the NRC to provide a hearing "upon the request of any person whose interest may be affected by the proceeding." (42 U.S.C. 2239(a)(1)(A)). In addition, §2.309 establishes that requests for petitions to intervene must meet the basic standing and "one good contention" requirements of the old §2.714.

The Commission's "rule of thumb" in reactor licensing proceedings is that "persons who reside or frequent the area within a 50-mile radius of the facility" are presumed to have standing. *Sequoyah Fuels Corp.*, 40 NRC 64, 75 n.22 (1994); See also, *Duke Energy Corp.*, 48 NRC 381, 385 n.1 (1998).

As the Commission has applied this standard, an individual demonstrates an interest in a reactor licensing proceeding sufficient to establish standing by showing that his or her residence is within the geographical area that might be affected by an accidental release of fission products. This "proximity approach" presumes that the elements of standing are satisfied if an individual lives within the zone of possible harm from the source of radioactivity. See *Virginia Elec. & Power Co.*, 9 NRC 54, 56 (1979) ("close proximity [to a facility] has always been deemed to be enough, standing alone, to establish the requisite interest" to confer standing).

Mr. Epstein resides at 4100 Hillsdale Road, Lower Paxton Township (Harrisburg), Pennsylvania, and works as a consultant at the same address. Based on the “proximity rule,” Mr. Epstein lives just outside of the proximity zone (approximately 56 miles from the Susquehanna Steam Electric Station), but works within 50 miles of the plant on a regular basis. Mr. Epstein’s consulting business takes him to Hazleton (or 15 miles from the SSES) Fogelsville (or 45 miles from the nuclear station), and Allentown (47 miles from the plant) on a regular basis. (2)

Mr. Epstein owns and operates a consulting business, EFMR Monitoring Inc., (3) that deals with nuclear and radiological issues at the SSES, Peach Bottom Atomic Power Station and Three Mile Island Nuclear Generating Station. EFMR and the 4,500 other businesses in the Susquehanna River Basin employ 230,537 people and add \$6.8 billion to the region’s economy, depend on the water from the Susquehanna River, and are grossly underinsured in the event of a nuclear accident at the Susquehanna Steam Electric Station. Any alteration, contamination, increased removal or other disturbance impacts all business, commercial, and residential stake holders. (4)

Dating back to the late 1940s, residents, business and commerce in the Basin became aware of the value of dependable, reliable, and economic sources of water. Water supplies can be disrupted or lost by another business using water from the same aquifer. Please refer to the Pennsylvania Supreme Court from our background and precedent, i.e. Hershey Chocolate Company v. the Annville Stone Company.

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2 Mr. Epstein's next business meeting in Hazleton will be at the Penn State campus on February 21, 2007; Mr. Epstein last business meeting at the Glasbern Inn in Fogelsville was on January 11, 2007, and Mr. Epstein’s next business meeting in Allentown is scheduled for February 7, 2007 at the SEF office on Postal Road or

3 The EFMR Monitoring group was established in 1992. EFMR monitors radiation levels, invests in community development, and sponsors remote robotics research. [efmr.org](http://efmr.org)

4 U.S. Census Bureau's 2004 Annual Economic Surveys.

As a shareholder, Mr. Epstein have a vested interest in the economic impact of the relicensing, but since the SSES is out of the rate base, a license extension will dramatically increase the gap in radiological decommissioning and expose shareholders to increased financial burdens. (5) The problem for PPL shareholders is that, according to PP&L and PPL's Annual Reports, the Company cannot predict with any degree of confidence how much it will cost to decommission the SSES. Projected costs for nuclear decommissioning have increased wildly from 1981 to 2003. In 1981 PP&L predicted that its share to decommission SSES was between \$135 to \$191 million. By 1985 the cost estimate had climbed to \$285 million. And by 1991, the cost in 1988 dollars for the "radioactive portion" of decommissioning, was \$350 million. PPL's contractor conducted a site-specific study which projected that the cost of decommissioning would be \$725 million in 1993 dollars. By 2005, PPL projected costs to decommission Susquehanna to be almost \$936 million.

It's anybody guess what the final cleanup tab will be if the plant is relicensed. Moreover, PPL Electric's 1998 restructuring settlement agreement provides for the collection of authorized nuclear decommissioning costs through the Competitive Transition Costs (CTC). The CTC nuclear decommissioning cost recovery mechanism for \$131 million **expires** on December 31, 2009 and the shareholders are the sole source of replacement revenues ("PPL Annual Report,"December 31, 2003, p.63.) .

Furthermore, since his family lives south of the plant, any adverse environmental impact, such as radiation release or pollution of the Susquehanna River, would have a direct and lasting impact on their health, way of life, and water supplies, especially during periods of drought (summer, 2004), and devastating flooding (Hurricane Agnes, 1972 and Hurricane Eloise, in 1977.)

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5      Until recently, NRC regulations only allowed for an antitrust review (42 USSC § 2135(c)) when a new licenses was issued. The NRC recently issued an Environmental Assessment Identification of a Proposed Action at Diablo Canyon. The proposed action would delete the antitrust license conditions from the license: "The Need for the Proposed Action Circumstances have changed significantly from those that existed when the antitrust license conditions were first imposed 28 years ago.(Federal Register: September 20, 2006 (Volume 71, Number 182, pp. 55035-55036).

Eric Joseph Epstein has clearly defined economic and physical interests at stake in the license extension of the Susquehanna Steam Electric Station. He has established a causal nexus between the alleged injury and the challenged action, connected the causality, and established that the avoidance of PPL Susquehanna's proposed license extension would cure the potential for injury. In addition, Mr. Epstein has satisfied the "proximity presumption," that allows standing for individuals who reside or frequent the area within a 50 mile radius.

***B. Eric Joseph Epstein Has Standing on Behalf of  
Three Mile Island Alert, Inc.***

TMI-Alert is a safe-energy organization based in Harrisburg, Pennsylvania and founded in 1977. TMIA monitors the Susquehanna Electric Steam Station (Please refer to tmia.com). (6)

Three Mile Island Alert Inc. has numerous dues paying members that reside in the Susquehanna Steam Electric Station's proximity and throughout the Susquehanna River Valley. These members have concrete and particularized interests that will be directly affected by this proceeding.

TMI-Alert's membership is proprietary. Three Mile Island Alert's standing on behalf of the region in regard to nuclear matters has been resolutely and repeatedly established by the Pennsylvania Senate and House of Representatives. (7)

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6 To assist PPL and the NRC staff, as well as interested parties and researchers, TMI-Alert established an archives at Dickinson College over 15 years ago. The collection has been professionally maintained under the direction and curatorship of James Gerencser (gerencse@dickinson.edu) at Dickinson College's Waidner-Spahr Collections. PPL or the NRC staff can (and could have) accessed a full-accounting of TMI-Alert's thirty year history at this research institution.

7 Exhibits 1 and 2 are Citations issued by the Pennsylvania Senate and House of Representatives which confer statewide standing on TMI Alert, Inc.

Mr. Epstein has advocated for rate relief on behalf of Three Mile Island's membership as a result of the construction and licensing of the Susquehanna Steam Electric Station for over 20 years. Mr. Epstein's comments and testimony are a matter of public record, and PPL and the NRC staff can easily locate this information by contacting the Pennsylvania Public Utility Commission. Additionally, Mr. Epstein has litigated economic, rate structure and nuclear issues relating to the Susquehanna Electric Station, electric deregulation and post-deregulation economic impacts. Epstein has been acknowledged as an expert witness before the Pennsylvania Public Utility Commission. Epstein's expertise relates to rate structure and rate payer equity, consumer education, economic development, job retention and tax structure, nuclear fuel cost adjustments, and nuclear decommissioning cost recovery. (8)

TMIA's membership living with 50 miles of the Susquehanna Steam Electric Station have real, immediate, physical, and financial concerns relating to continued operation of the SSES beyond its current license. Moreover, TMIA's membership has legitimate and historic concerns regarding radiological contamination resulting from radiological releases related to normal and abnormal operations that impact the value of its property, and interfere with the organization's rightful ability to conduct operations in an uninterrupted and undisturbed manner.

Clearly, TMI-Alert has satisfied the criteria embedded in "judicial concepts of standing." Mr. Epstein is the Chairman of TMI-Alert and is authorized by the TMI-Alert Planning Council to represent the interests of the organization in this proceeding. At the January 24, 2007, TMIA Planning Council meeting, Mr. Epstein updated the Council regarding the group's opposition to the relicensing of the Susquehanna Electric Steam Station.

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<sup>8</sup> Please refer to Exhibit 3, which lists a portion of the PPL cases Mr. Epstein has been involved in on behalf of TMI-Alert.

***C. Eric Joseph Epstein Qualifies for Discretionary Intervention.  
10 C.F.R. § 2.309 (e).***

Mr. Epstein's participation may reasonably be expected to assist in developing a sound record. Epstein is well versed and an acknowledged nuclear expert: "...On careful review of the pleadings, we acknowledge Epstein's expertise in the areas of nuclear decommissioning, nuclear waste isolation, nuclear economics, nuclear safety, universal service, and community investment" See Epstein Protest, para. 10." (9)

Epstein can also provide local insight that cannot be provided by the Applicant or other potential parties as was witnessed at the Environmental Scoping meeting in Berwick on November 15, 2006. Mr. Epstein identified the legitimate and peculiar interests of the Susquehanna River Basin Commission (SRBC), and introduced representatives from the NRC-NRR's, Division of License Renewal Chief, Environmental Branch to members of the SRBC in attendance. And, as established by this pleading, this proceeding may have significant effects on Epstein and TMIA's members. Epstein therefore qualifies for discretionary intervention. 10 C.F.R. § 2.309 (e).

Indeed, Epstein has participated in numerous PUC, NRC and related regulatory proceedings. The nature of his own property and business interests, and his responsibility to TMIA membership are clear and germane to the Present proceeding.

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<sup>9</sup> PA PUC Commission, Public Meeting held July 14, 2005 Commissioners Present: Wendell F. Holland, Chairman; James H. Cawley, Vice Chairman Bill Shane; Kim Pizzingrilli; and, Terrance J. Fitzpatrick. " A-110550FO160 Joint Application of PECO Energy Company and Public Service Electric and Gas Company for Approval of the Merger of Public Service Enterprise Group Incorporated with and into Exelon Corporation.

***D. Eric Joseph Epstein has Prudential Standing as Chairman of Three Mile Island Alert, Inc.***

TMIA's history and mission, as previously stated, are germane and important to this proceeding. Many TMI-Alert members live less than fifty miles from the SSES, or are within its Emergency Planning Zone, and are subject to radiological contamination, effluent discharges, emergency evacuation, loss of property, or other harms in the event of any mishap at the plant. Members also depend on the water from the River for daily sustenance, and also recreate, fish and enjoy the segment of the Susquehanna River adjacent and below the Susquehanna Steam Electric Station. (10)

An organization has standing to sue on behalf of its members when a member would have standing to sue in his or her own right, the interests at issue are germane to the organization's purpose, and participation of the individual is not necessary to the claim or requested relief." *Hunt v. Washington State Apple Advertising Cornrn*, 432 U.S. 333, 343 (1977).

As demonstrated by the above discussion and attached supporting materials, many of the members represented by Three Mile Island Alert would have standing in their own right. The issues in relicensing are germane to TMIA's stated mission. And, the individual participation of the members is not necessary to the claims or requested relief.

American jurisprudence has created a prudential standing requirement that a plaintiff's interests fall within the "zone of interests" protected by the statute on which the claim is based. *Bennett v. Spear*, 520 U.S. 154, 162(1997). The Atomic Energy Act and NEPA protect the same interests held by Eric Joseph Epstein and Three Mile Island Alert's members and are furthered by TMIA's purpose and Epstein's intervention.

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<sup>10</sup> Mr. Epstein's most recent advocacy on behalf of TMIA membership living within proximity of the SSES was well established at the NRC in 2006. Please refer to footnote 17 in Mr. Epstein's January 2, 2007, Petition to Intervene.

Based on Mr. Epstein's expertise, Epstein should be granted discretionary prudential standing at the time the Atomic Safety and Licensing Board convenes a hearing and admits a contention(s).

#### **IV. Eric Joseph Epstein Submitted Five Admissible Contentions**

Rather than restate and repost the arguments offered in his January 2, 2007, Petition, Mr. Epstein will review his argument for standing while addressing the elements the NRC staff and PPL believe are missing from his original argument.

##### **Contention 1:**

PPL Susquehanna failed to provide the requisite data necessary to determine if it has the ability to maintain and service the financial obligations it inherited from the original licensee, i.e., PP&L. Regulatory conditions have materially changed and adversely affected PPL's ability to guarantee it can finance the "back-end" of nuclear power production at the SSES.

PPL Susquehanna LLC, the majority owner and operator of the Susquehanna Electric Station, is the corporate progeny of the original holding company, i.e., PP&L, that applied for, and obtained a license to operate the SSES, and the new corporation warrants a comprehensive financial due diligence to ascertain the ability of the nascent and emerging limited liability corporation to service its nuclear obligations under deregulation.

The NRC has failed to conduct a financial audit of PPL Susquehanna as a stand-alone limited liability company. There was no opportunity to review the financial status of PPL Susquehanna at the time PPL was licensed to operate the Susquehanna Steam Electric Station since:

1) **PPL Susquehanna did not exist;**

2) The 1996 Electricity Generation Customer Choice and Competition Act gave Pennsylvanians the option to choose an "electric generation supplier" and PP&L became PPL. This legislative event occurred **14 years after** Unit 1 received an operating license in July, 1982. Since PPL's generation assets have been removed from the rate base, and based on rulings made by the Pa PUC limiting their oversight of nuclear power production, the NRC's Atomic Safety & Licensing Board (ASLB) is the appropriate body to raise economic impact issues relating to the license extension of the SSES.

3) Since there was **no indirect or direct license transfer** from PPL Electric Utilities to PPL Susquehanna, Mr. Epstein was deprived of an opportunity to evaluate the new Company's ability to operate, maintain, and decommission the SSES.

4) Recent evidence suggest that not only is the **SSES out of the rate base**, but PPL Susquehanna is unable and unwilling to provide data that demonstrate that it has the requisite financial health to operate the SSES for an additional twenty years. (Please refer to Exhibit 4)

The Nuclear Regulatory Commission (NRC) defines "electric utilities" as "any entity that generates or distributes electricity and which recovers the cost of electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority (10 CFR § 50.2)."

PPL's status as an "electric utility" is in jeopardy, and its ability to service financial, fiscal, and decommissioning obligations has been eroded by the Company's removal from the rate base. Without these guarantees, there can be no adequate assurance that the aging safety components can and will be maintained.

The NRC rules define 'electric utilities' as 'any entity that generates or distributes electricity and which recovers the cost of electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority. (10 C.F.R. 50.2)

The Staff sidesteps the status of PPL Susquehanna as a new stand-alone limited liability corporation, and scoops into a large basket encapsulated “the economics of nuclear power.” (NRC Staff’s Response to Eric Joseph Epstein’s Petition, pp-15, footnote 8) The current license extension is for a company that does not qualify as an ‘electric utility’ under NRC statute (NRC Staff’s Response to Eric Joseph Epstein’s Petition, pp-15-16.)

Mr. Epstein’s remedy and cure for the evaluation of the new Company was nonexistent in so much as that the transfer of a direct and or indirect license never took place. The NRC never identifies the venue for vetting corporate organization, “Any concerns Mr. Epstein had with the nature of this corporate restructuring should have been brought during the consideration of that application.” (NRC Staff, p. 15)

Moreover, at the heart of holding a reactor license, is whether or not the licensee has provided a “reasonable assurance” that it can operate a nuclear power plant. Mr. Epstein has presented concise and documented data that the new company has not provided financial assurances they can safely operate the plant for another 20 years.

Standard for operating license decisions whether there is reasonable assurance of public health and safety to allow plant operation, either for full licensing term or until additional analysis's is completed that would provide additional assurance for full-term license. (Re: Louisiana Power & Light Company (1985, CLI) 21 NRC 47142 USCS § 2133, n 2, p. 330).

Mr. Epstein is within his rights to ask for an independent (13) audit to assure that public health and safety is not a risk by relicensing a new limited liability corporation to operate the SSES for 20 years.

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13 The, NRC may contract out for examiners to perform testing procedures involved in licensing nuclear reactor operators, such contracts are not prohibited personal service contracts, and contract examiners are not performing inherently governmental function” (NRC Licensing Examiners (1991) 70 Comp 682, 42 USCS § 2134, p. 3310.)

PPL Susquehanna LLC is not in the rate base, and is subject to the whims and unprotected forces of the marketplace. The NRC can no longer assume that PPL Susquehanna enjoys the economic shield of rate payers and “that utilities commission would support project with favorable rate decisions” (New England Coalition on Nuclear Power v. US N.R.C., (1978 , CA 1) 582 F2d 87, 8 ELR 20707, 51 ALR Fed 451.)

The financial safety nets and assumptions embedded in the original application are gone. There is no rate recovery mechanism for nuclear safety upgrades, generic rulemaking orders, nuclear decommissioning increases, security, radiological monitoring, or nuclear fuel adjustments. The ability to safely operate a plant is intricately linked to the ability to provide and pay for a level of safety and security in the community.

PPL Susquehanna has not proven it has the requisite financial structures in place to safely operate a nuclear power plant; especially, a plant that is not linked to the savings of scale embedded in fleet operations. The SSES is a rare stand-alone plant that requires safety in-depth.

The facts presented in Mr. Epstein’s January 2, 2007 Petition demonstrate that PPL’s application is deficient and lacks the requisite data to support or conclude that the Company can service its financial obligations associated with the operation, decontamination and decommissioning of the Susquehanna Electric Steam Station.

## **Summary**

Prior to deregulation, nuclear applicants which were “financially challenged” were able to establish “reasonable assurance” they could raise money through capital markets precisely because the applicant was a public “electric utility.”

However, since the TMI accident and the advent of electric deregulation, the NRC can no longer presume favorable rate decisions by any utility commission. Nor can the Commission presume rate tariffs will supplant financial chasms created by limited liability corporations. The NRC should recognize that the Present case is an opportunity for the Commission to supplant anachronistic presumptions, e.g., *New England Coalition on Nuclear Pollution v. U.S. NRC* (1978, CA1) (582 F2d 87, 8 ELR 20707, 51 ALR Fed 451) with fresh case law that recognizes a radically changed public utility landscape.

a) The NRC should conduct an independent audit and due diligence, of the newly formed corporate applicant, PPL Susquehanna LLC, to prove they possess the requisite financial wherewithal to service nuclear obligations without penalizing the host communities surrounding the SSES.

b) The NRC's Atomic Safety and Licensing Board should compel PPL to prove it can satisfy the NRC requirements that it is an “electric utility” when the Company is removed from Pennsylvania generation base rates on December 31, 2009.

## **Contention 2:**

PPL failed to factor, consider and address numerous water use and indigenous aquatic challenges present and anticipated for the Susquehanna River environs in the Berwick-area.

The Aging Management program proposed in the Susquehanna Electric Steam Station application for license renewal is inadequate because:

- (1) It does not include proactive action plans for water challenges resulting from natural and mechanical adversaries;
- (2) It does not include a voluntary tritium action plan;
- (3) It does not recognize that it is initial manifest with the Susquehanna River Basin Commission application has been grandfathered and must be resubmitted; (4) It does not factor Act 220 into water use considerations (14), although the rule had been vetted and reviewed prior to the submittal of the license extension; (5) It does not provide for adequate inspection of all systems and components that may contain radioactively contaminated water; and,
- (6) There is no adequate monitoring to determine if and when leakage from these areas occurs. Some of these systems include underground pipes and tanks which the current aging management and inspection programs do not effectively inspect and monitor.

Where a contention alleges a deficiency or error in the application, the deficiency or error must have some independent health and safety significance.” *In the Matter of Dominion Nuclear Connecticut, Inc.*(Millstone Nuclear Power Station, Units 2 and 3) Docket Nos. 50-336-LR, 50-423-LR ASLBP No. 04-824-01-LR July 28, 2004, p. 7. *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP- 98-7, 47 NRC 142, 179-80 (1998), *aff’d in part*, CLI-98-13, 48 NRC 26 (1998).

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<sup>14</sup> The Susquehanna River Basin Commission and the Pennsylvania Department of Environmental Protection have been in the process of collecting, evaluating, and implementing a comprehensive water use plan for Pennsylvania known as Act 220.

The sufficiency of the Aging Management Plan for considering water use implications, aquatic challenges, and leaks in systems and components that contain radioactive water is material to the renewal of this license because that problems could significantly impact health and safety. In fact, less than a month ago the Nuclear Regulatory Commissioners decided to personally hear arguments on the potential effects on the Connecticut River of extending Vermont Yankee nuclear power plant's operating license an additional 20 years. Clearly, water impact issues are on the table for relicensing discussion.

The staff complained that PPL is under no obligation to anticipate a future law” (15), and further presumes that the grandfathered SRBC Commission is current, assumes that PPL is in compliance, dismiss Asiatic clam and Zebra mussel “concerns” and minimize the import of tritium monitoring, and (NRC Staff, pp. 18-20) essentially ignores historic implications of PUC’s 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. In addition, PPL has not established, nor has the NRC reviewed compliance milestones for EPA’s Act 316 (a) or 316 (b). PPL Susquehanna failed to investigate or report on the impact of the fragile series of shad ladders.

It is not uncommon for the plants 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. Asiatic calm infestation has challenged Peach Bottom and Three Mile Island’s cooling systems, and it is logical for PPL Susquehanna to submit an action plan to defeat both environmental challenges should they migrate upstream.

Water shortages on the Lower Susquehanna reached critical levels in the summer of 2002. During the 2002 drought, the SSES was exempted from water conservation efforts. For the month of August 2002, 66 of 67 Pennsylvania counties had below normal precipitation levels. The SSES did not take any measures or precautions to “conserve” water. Moreover, recent and consistent droughts in Pennsylvania (2002) as well as flooding (2006) have forced state and regulatory bodies to reexamine water as a commodity in the Commonwealth of Pennsylvania.

Last year, despite the fact Columbia County was -3.6 inches below normal precipitation levels and Luzerne County was -3.2 inches under ( a 51-75% decrease below the norm), the SSES continued to gobble up water as their neighbors conserved. (DEP Drought Watch, April 11, 2006)

Water use must be factored into the application for renewal. This is not an academic issue as evidenced by a Pennsylvania court decision last month guaranteeing the rights of citizens to have access to the Little Juniata River in Huntingdon County for fishing, boating, and other recreation. Furthermore, the Pennsy Supply suit v. the SRBC (December 22, 2006), will have long term implications on the SSES ability to mine water from the Susquehanna River. Those regulations increased the Commission power to regulate water usage by business and public facilities.

Tritium is a national and localized issue of import. NRC established a task force to investigate tritium leaks on March 21, 2006, following numerous unmonitored releases of water containing tritium during the last decade at some plants. The task force's charter is on NRC's Adams document system under accession number MLO60690186. On November 2, 2006, J.E. Dyer, Director of Office of Nuclear Reactor Regulation stated: "The staff agrees that radioactive liquid which leaks into the ground undetected on a plant site, should be identified and addressed by licenses before quantities of the radioactive material migrate offsite that may result in radiation dose limits being exceeded."

The NRC's voluntary compliance reporting requirements in regard to onsite and offsite tritium monitoring is already being implemented by Peach Bottom and Three Mile Island. It is reasonable to require similar benchmarks be outlined in the SSES's license application, especially in light of the Pa DEP's correspondence to the NRC on January 17, 2006. (Please refer to Exhibit 5)

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15 Response to David Lochbaum , Director, Nuclear Safety Project, the Union of Concerned Scientists.

PPL's relicensing application does not include a hastily filed Application for Surface Water Withdrawal Request to Modify Application 19950301 EPUL-0578 (See Exhibit 5, PPL Letter to SRBC, December 20, 2006, p. 2). In fact, PPL Susquehanna actually references the NRC filings in the SRBC application (Exhibit 6). (16) However, none of the filings include action plans to defeat external aquatic predators, manage or control water management with recent and emerging Pennsylvania standards, or implement a tritium monitoring program or repair faulty or corroded piping.

The most disturbing admission contained in PPL's report to the Susquehanna River Basin Commission relates to corroding and poorly performing piping (17).

The River Intake Structure flow meters to measure withdrawal. However, metering of the withdrawal has been inaccurate due mainly to corrosion and fouling of the intake pipes. The intake pipes are made of carbon steel, and PPL is evaluating replacement of sections of this pipe with stainless steel pipe to minimize flow measurement meter error... If the pipe replacement project proceeds and withdrawal quantities determined by the two methods are comparable, then PPL will use the metered withdrawal to periodically verify the calculated withdrawal based on the sum of cooling tower water loss, cooling tower blow down, and emergency spray makeup. If the metered withdrawal is significantly different from the calculated withdrawal, PPL will discuss with the Commission the appropriate next steps for measuring withdrawal. PPL will keep the Commission apprised of these activities.

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- 15 The inability to coordinate with new and emerging regulations from the SRBC and Act 220 is a **self-inflicted hardship**. The NRC can not excuse PPL's omissions and failure to submit an action plan on these state regulations. These regulations have been enacted, and were in the implementation stages for several years **prior** to PPL's filing. PPL, through its own haste to relicense the Susquehanna Electric Steam Station, left these obligations off of their relicensing matrix.
- 16 PPL Susquehanna's corporate family has a recent history of fouling water resources. On January 12, 2007 PPL Holtwood was ordered to stop the discharge of coal bottom ash into the Susquehanna River and was assessed a n \$85,000 civil Penalty by the Department of Environmental Protection. Four days later, PPL announced it has reached a \$1.5 million preliminary settlement to end a lawsuit over the 2005 fly ash spill at the Martins Creek power plant into the Delaware River.

## **Summary**

**PPL's request is incomplete and premature.**

**The Susquehanna Steam Electric Station is a large industrial consumer of a valuable and limited commodity, and has responsibilities to coordinate water use like all other businesses. Any comprehensive and substantive water management plan must include the impact of relicensing and uprates planned for the SSES.**

**1) The Company must resubmit and revise its application to address issues raised by Mr. Epstein.**

**2) Since, "PPL already has factored the increased generation output into its projected long-term compound annual growth rate of 11% and its 2010 earnings target of 3.50 per share," the Company needs to also include an impact statement that factors the synergetic impact of a 200 mw uprate, coupled with a 20 year license extension on the environment, and include implications for Accept 220 and regulations enacted by the SRBC in December, 2006.**

**3) PPL must resubmit the relicensing application after Act 220 has been implemented.**

**4) None of these requests present a hardship to PPL Susquehanna in as much as the SRBC will require months of deliberations to review PPL's filings.**

### **Contention 3:**

PPL's demographic profile is flawed and incomplete. The application fails to consider the aging population and workforce which impacts supports services, emergency planning, workforce replenishment and traffic patterns.

Pennsylvania is the second oldest state in the nation, and its fastest growing population segment is octogenarians. An aging population base has unique and sensitized needs that were not factored, considered, or analyzed in the licensee's application. Moreover, by its own admission, PPL's plan to raise electric prices by at least 20% to 30% in the near future affects fixed-income and aging population bases especially hard. (Petition of PPL Electric Utilities Corporation for Approval of a Competitive Bridge Program, Pa PUC, Docket No: P00062227, 2006) An aging population base affects staffing, offsite support and response times, emergency planning and social services. These human components are critical ingredients in the infrastructure of any large industrial complex.

Although socioeconomic data is solicited, the staff argues that the reality surrounding the plant is "not material" (p. 21), "does not provide sufficient information to show that a genuine dispute exists with the application a material issue of law or fact" (p. 22), accepts dated and generalized socioeconomic data rather, and does not grasp that an aging local population will suffer a physical hardship by paying higher taxes and higher electric rates to help subsidize an aging nuclear generating station.

Why would the NRC require data if its not going to evaluate the veracity and currency of the information? Does the NRC believe that its responsibilities for minimizing physical harm and ensuring communal well-being end at the fence line? Clearly, the NRC cannot "simultaneously" examine consequences inside the plant while ignoring the physical and safety impacts to the community outside of the fence line. (42 USCS § 2131, 42 USCS § 2011 etseq. and NEPA, 42 USCS § 4321, and Detroit Edison Co. US NRC [1980, CA6] 630F2d 450, 14 Envir. Rep Cas 2090, 10 ELR 20879)

While PPL and the NRC have spent large sums of money and countless hours examining the effect of aging of reactor components and an aging management review pursuant to 10 C.F.R. §54.21(a) and 10 C.F.R. § 54.21(c), neither entity has examined the impact of relicensing on aging human beings who live within the shadow of the plant.

In Luzerne County, the population declined 1.8% between 2000 and 2003, and Columbia experienced a .9% increase. The U.S. Census Bureau reported that the average population of 65 years or older per county is 12.4%. However, the percent in Luzerne is 19.7% and in Columbia it is 15%. In Salem Township, host to the nuclear plant, the percentage of residents over 65 years of age is 19.6%. (18)

Columbia and Luzerne Counties are two of six counties in the 29 county rate base “above the system average percentage of the poverty level.” The data PPL uses is supplied by the Census Bureau and PA PUC’s Bureau of Consumer Services, and indicate that 22.8% of the Luzerne County and 23% of the Columbia County populations qualify as “low-income households” eligible for energy assistance, i.e., living at or below the federal poverty levels.

People are not abstract hypotheticals that attorneys in DC can rework into a neat formula. Taken together, both counties are housing older Pennsylvanians less likely to be absorbed into a nuclear work force. These senior citizens are concurrently paying higher electric rates, and more in property taxes as a result of the operation of the Susquehanna Steam Electric Station.

The Company has not anticipated or planned to address the hardships it has created for the 65+ community: “PPL Electric has conducted no polling to gauge residential customers’ awareness of rate caps and the impact that the removal of those caps would have on electric rates.” (PPL EU, Pa PUC, Bridge to Competition, 2006).

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18 United States 2000 Census, U.S. Census Bureau Bureau, December 24, 2006.

None of the above-cited demographic facts have been disputed by the staff or PPL.

The applicant raised and attempted to address socioeconomic, housing, transportation, quality of life, and workforce issues throughout the license application, and failed to address to numerous issues that could adversely impact the license extension request. What's the point in providing a cursory overview of socioeconomic, environmental and safety concerns raised if the NRC's stock response is that the data is not "material", "genuine", or "relevant."

### **Summary**

The SSES area is an aging population with a significant portion of its residents living in poverty and facing rate shock and higher property taxes. If the Company can marshal the resources to seek approval for an uprate, relicensing and increase its rates, than it can find the time and resources to prepare an analysis to asses the impact of rate shock and property devaluations on the most vulnerable populations residing in its own backyard.

PPL must resubmit portions of its application relating to an aging labor force and aging population base and the socioeconomic stress that these developments have on social services, the tax base, rate shock, existing poverty levels, and institutional memory. PPL and the NRC must reexamine the plant's demographics for operating the nation's 19th and 20th largest nuclear reactors.

Failure to survey the impacts of relicensing on an aging community, while scouring the corners of an aging reactor, is a stunning indictment on the NRC's inability to grasp that a good workforce and a solid community are interchangeable parts.

#### **Contention 4:**

PPL's tax analysis is fatally flawed and lacks historical perspective. The Company failed to assess the impact of Revenue Neutral Reconciliations at the SSES on local citizens, residents, taxpayers, and homeowners.

By limiting their historic snapshot from 2001-2005, PPL provides a false and incomplete fiscal picture of the impact their property devaluations and legal suits had on local taxing bodies. The transition from the PURTA to RNR has been a disaster. PPL has conveniently omitted the tax strain it has caused the Berwick Area School District, Salem Township, Luzerne County, residential consumers and senior citizens living on fixed incomes.

The applicant raised and attempted to address socioeconomic and tax related issues, but offered only cursory and superficial data. PPL failed to address the negative impact that the Revenue Neutral Reconciliation tax assessment has had on the school district, municipalities and residential consumers. Specifically, this contention addresses socioeconomic, environmental and safety concerns that are relevant to the health and safety of area residents. This issue is well within the NRC's relicensing purview as established in 42 USCS § 2131, 42 USCS § 2011 etseq. and NEPA, 42 USCS § 4321, and Detroit Edison Co. US NRC (1980, CA6) 630F2d 450, 14 Envr. Rep Cas 2090, 10 ELR 20879.)

Relicensing a nuclear power plant should not impose economic hardships on the host community. PPL has successfully sued local taxing authorities, while at the same time increasing capacity and requesting a license extension. Either the NRC must reexamine the economic impact of SSES on the community, or address how relicensing a nuclear power plant while shifting the tax burden and increasing rates on an aging community is compatible with the NRC's mission.

In fact, PPL has agreed with Mr. Epstein on the import of the economics of the relicensing of the Susquehanna Electric Steam Station on the health and safety of the local community. In November 2006, as part of its effort to promote relicensing of the SSES, PPL and the nuclear industry released, *Economic Benefits of PPL Susquehanna Nuclear Power Plant An Economic Impact Study* by the Nuclear Energy Institute in Cooperation With PPL Corporation. Table 2-1. PPL Susquehanna Nuclear Power Plant specifically advertises and promotes the value of relicensing on local community, without evaluating any of the negative consequences Mr. Epstein identified in his Petition.

The NRC has gone out of its way to broach the issue of nuclear economics. For example, in Pacific Gas and Electric Company; Diablo Canyon Power Plant, the NRC acknowledged, “ In particular, there have been recent developments in the law at both the Federal and State levels to ensure competition in the industry in California and elsewhere (FR Doc E6-15589 [Federal Register: September 20, 2006 (Volume 71, Number 182)] [Notices] [Page 55035-55036].

The impact of relicensing on the local community is material and germane and the NRC should not sanction the relicensing of nuclear power plant that will result increased property taxes and electric rates and through up their hands and shout, “Not my problem.” The NRC can and must consider economic affects on a community since they are interrelated with the natural and physical effects of relicensing the SSES. (40 C.F.R. §1580.14, Met Ed V PANE, 460 U.S. 766, 722 (1983))

## Summary

Deregulation shifted power plants back to the local tax rolls under the assumption that utilities would pay at least the same amount had they been subject to real estate taxes. However, after the utilities collected over \$11.4 billion in “stranded costs” for building ill-advised nuclear power plants, they claimed that their generating stations had depreciated overnight and were only worth a fraction of pre-deregulation estimates. The NRC cannot ignore the impact these developments of had on the local communities’ safety and well-being

PPL is now asking to extend the license of the Susquehanna Steam Electric Station under a new protocol which would adversely impact an aging population dependent on a fixed income levels. As a result of PPL’s actions, this population that is being asked to absorb rising electric costs and property tax rates, in part due to the extended operation of the Susquehanna Steam Electric Station.

The NRC staff cannot wish the issue away because PPL choose to selectively analyze socioeconomic and tax data through a limited window. The NRC staff and PPL have missed the crux of Mr. Epstein’s argument. Staff stated, “...he [Mr. Epstein] never species which portion of the this analysis he believes is flawed.” (NRC staff, p. 25-26) That is precisely the point: PPL’s **omission**, rather than selective evaluation of the most favorable facts, is what Mr. Epstein is asking PPL and the NRC to address. (19)

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19 PPL’s Response to Mr. Epstein is inaccurate. Mr. Epstein is specifically seeking to redress to the imbalances PPL’s law suit had on the he Berwick Area School District, Salem Township and Luzerne County. In footnote 16 found on page 29, PPL argues that it is paying “\$4 million in property taxes” compared to \$1 million during the PURTA-era. Which begs the question, why did PPL sue the local taxing agencies? PPL supplied the answer when they disputed the county’s \$3.9 billion assessment of the SSES (the plant cost \$4.1 billion to build according to PPL’s web site). PPL sued local taxing bodies, and cut its tax contributions from \$70 million to \$3 million annually. PPL commingles its contributions in the footnote and fails to properly conclude that while state tax revenues have increased, local contributions have decreased as a a result of PPL’s suit against local taxing authorities. (PPL Cooperation Annual Report, pp. 27 and 69)

a) A sense of fair play and economic sanity require that the NRC compel PPL to revise and resubmit the tax impact of relicensing the SSES under current condition. PPL should prepare and submit documentation as to the amount of taxes paid under the Public Utility Real Estate Tax Assessment in 1995 versus the amount of taxes paid under the Revenue Neutral Reconciliation in 2005 and the projected amount of tax revenue the SSES will pay in 2015.

b) The NRC should compel PPL to resubmit portions of its application relating to the socioeconomic stress that the RNR assessment has had on social services, the tax base, existing poverty levels, and reexamine the plant's economic impact based on PPL's tax shifting policies.

c) The NRC must compel PPL to explain how its tax policies benefit local communities as the Susquehanna's capacity and environmental impact increase, while the Company's charitable contributions, social programming and revenue contributions steadily decline as evidenced in recent PUC proceedings (Re: Pennsylvania Public Utility Commission v. PPL Electric Utilities Corporation; Docket No. R-00049225C, 2004).

## **Contention 5:**

PPL is in violation of the following Federal Regulations: 10 CFR § 50.47; 10 CFR § 50.54; 10 CFR § Part 50 Appendix E; and 44 CFR § 350.

The Nuclear Regulatory Commission should hold a final decision for relicensing the SSES in abeyance until such time that PPL can demonstrate and verify its compliance with emergency preparedness measures at the Susquehanna Steam Electric Station under the Radiological Emergency Protective Measures outlined in 10 CFR § 50.47 (Condition of Licenses).

The Susquehanna Steam Electric Station has failed to provide any verifiable information that “reasonable assurance” exists that they have include child care facilities in their Radiological Emergency Plans for the past 25 years. As such, the SSES is in violation of Federal Laws put into place due to Presidential Executive Order 12148 which mandates the provision of “reasonable assurance” that the public, including preschool children, could be protected in the event of a radiological incident. The NRC can not extend the license of a nuclear power plant that is in violation of the following Federal Regulations: 10 CFR § 50.47; and 10 CFR § 50.54; 10 CFR § Part 50 Appendix E; and 44 CFR § 350.

Guidance Memorandum EV-2 “Protective Actions for School Children” (GM EV-2) has been in place since November 3, 1986. This federal regulation requires that appropriate state and local government agencies provide all licensed childcare facilities (with more than 10 children) residing in Emergency Planning Zones (EPZ) with pre-planned radiological emergency services including notification, transportation and relocation centers.

GM EV-2 “Protective Actions for School Children” specifically addresses licensed and government supported preschools and daycare centers. The provisions have not been implemented to include all special needs’ populations and nursery schools (with more than 10 children) within ten miles of Susquehanna Steam Electric Station in Salem Township, Pennsylvania.

In addition, the Susquehanna Steam Electric Station is not in compliance with the criteria regarding emergency provisions for day-care centers and nursery schools outlined in Federal Register Notice Vol. 70, No. 242, Monday, December 19, 2005.

Despite repeated efforts by Mr. Epstein to alert, petition, and notify the Nuclear Regulatory Commission (NRC), the Federal Emergency Management Agency (FEMA), and the Commonwealth of Pennsylvania the deficiencies over a four year period, all three bodies have steadfastly refused to provide or enforce the protective actions as outlined in Guidance Memorandum EV-2 “Protective Actions for School Children” and bring the operating license at the SSES into compliance.

Mr. Epstein filed suit at the Department of Justice on August on 28, 2006. (20) Among relief measures Epstein requested was an action to compel the Department of Justice to compel Federal Emergency Management Agency and the Nuclear Regulatory Commission to review and assess the Special Needs’ Emergency Preparedness Plans at Pennsylvania’s nuclear generating stations to ensure that GM EV-2’s Protective Measures are in place for preschoolers and day care centers throughout Pennsylvania. (21)

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20 PPL argues that “Mr. Epstein did not file any lawsuit , but is instead referring to a letter that he sent to the Department of Justice....” (PPL p. 31, footnote 27). PPL failed to note that the 58 page “letter” with 16 exhibits was referred by the Pennsylvania Attorney General to the GAO which referred the “letter” to the Department of Homeland Security on November 20, 2006. On December 28, 2006 and January 10, 2007, Congressman Tim Holden sent a “letter” to Mr. Epstein notifying him that he was pursuing the “status of the case” with the DHS and the NRC (Exhibit 7.)

21 PPL also misrepresented Senate Bill 922 which became law without the Governors signature because of “the limited scope of the bill.” According to the Governor, the legislation was “silent with respect to emergency planning for the evacuation of 183,000 children in licensed nonprofit or family care entities,” including those within ten miles of the Susquehanna Steam Electric Station. (Please refer to Exhibit 8, Governor Rendell’s Letter to the Senate of the Commonwealth of Pennsylvania.)

## V. Conclusion.

PPL and the staff failed to respond or challenge the legal facts above.

No proof exists that the Susquehanna Steam Electric Station is in compliance for any special needs' populations living within ten miles. As such, the SSES are in violation of Presidential Executive Order 12148 to provide "reasonable assurance" that the public, including preschool children, could be protected in the event of a Radiological Emergency as a condition to own and operate a nuclear power plant. Based on the enclosed referenced exhibits, it is abundantly clear that FEMA is unable to properly implement GM EV-2 and has been submitting false findings to the NRC relating to Susquehanna Steam Electric Station for 25 years.

Relicensing at the Susquehanna Steam Electric Station must be delayed until this legal challenge is resolved to ensure that the NRC does not extend an out-of-compliance license. The GAO, who investigated Mr. Epstein's legal challenge upon referral by the Pennsylvania Attorney General Thomas Corbett, Esquire, docketed and forwarded the case to the Department of Homeland Security on November 20, 2006.

It is **physically impossible** for federal, state, or local government to verify that any of Pennsylvania's special needs' populations can subscribe to NUREG-0654 J-12 Reception Centers since these facilities have not been assigned a relocation center. (22) These facilities can not "reasonably assure" a 12 hour monitoring standard from an unidentified relocation center that may (or may not) exist "at least 5 miles, and preferably 10 miles, beyond the boundaries of the plume exposure emergency planning zone:"

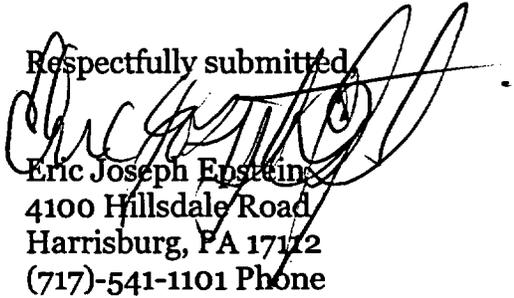
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<sup>22</sup> Also included in these "special populations" are nursing homes, group homes for the mentally impaired, and correctional facilities.

## V. Conclusion

Eric Joseph Epstein has met all for the requirements stated in "2.309 Hearing requests, petitions to intervene, requirements for standing, and contentions", and his Petition to Intervene should be granted and all five (5) contentions accepted.

Respectfully submitted,



Eric Joseph Epstein  
4100 Hillsdale Road  
Harrisburg, PA 17112  
(717)-541-1101 Phone

Dated: February 5, 2007

**Enclosures:**  
Certificate of Service  
Exhibits #1-#8

CERTIFICATE OF SERVICE

I hereby certify that copies of enclosed correspondence dated February 7, 2007, were served on the persons listed below by deposit in the U.S. Mail, first class, postage prepaid and electronic mail. Please note that exhibits are only available in hard copy.

Administrative Judge  
Ann Marshall Young, Esq., Chairman  
Atomic Safety and Licensing Board  
Mail Stop T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
[amy@nrc.gov](mailto:amy@nrc.gov)

Administrative Judge  
Dr. Kaye D. Lathrop  
Atomic Safety and Licensing Board  
Mail Stop T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
[klathrop@independence.net](mailto:klathrop@independence.net)

Administrative Judge  
Dr. William W. Sager  
Atomic Safety and Licensing Board  
Mail Stop T-3 F23  
Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
[wsager@tamu.edu](mailto:wsager@tamu.edu)

Secretary  
Att'n: Rulemakings and Adjudications Staff  
Mail Stop O-16 C1  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
[secy@nrc.gov](mailto:secy@nrc.gov); [hearingdocket@nrc.gov](mailto:hearingdocket@nrc.gov)

Susan L. Uttel, Esquire  
Molly L. Barkman, Esquire  
US N.R.C. - OGC  
Mail Stop O-15 D-21  
Washington, D.C. 20555-0001

Pillsbury, Winthrop et al  
David R. Lewis, Esquire  
PPL Susquehanna, LLC  
2300 N Street, N.W.  
Washington, D.C. 20037-1128

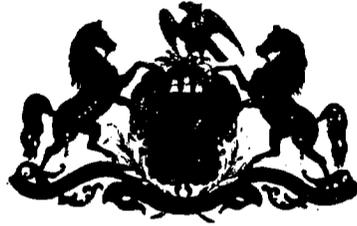
Department of Homeland Security  
Office of Inceptor General  
245 Murray Lane, SW  
Washington, D.C. 20528  
Control number: 48407

Office of Commission Appellate U.S.  
Adjudication  
Mail Stop O-16 C1  
U.S. NRC  
Washington, D.C. 20555-0001

Dated: February 5, 2007

## **Exhibit 1**

# Commonwealth of Pennsylvania



## The House of Representatives

### Citation

**Whereas**, *The House of Representatives of Pennsylvania is always pleased to acknowledge those organizations which contribute to the well-being of their communities and ultimately to all the people of this great Commonwealth; and*

**Whereas**, *Three Mile Island Alert is being congratulated upon the occasion of its twenty-fifth anniversary; and*

**Whereas**, *Since it was founded in 1977, Three Mile Island Alert has made immeasurable contributions toward the welfare of society and the community at large through its efforts to make the process of producing energy safe for all citizens. A succession of dedicated leaders and members has made this possible, keeping ever mindful of its noble goals and principles.*

**Now therefore**, *the House of Representatives of the Commonwealth of Pennsylvania salutes Three Mile Island Alert as it recommitts itself to the ideals and standards which have sustained it for twenty-five years; offers best wishes for a continued tradition of humanitarian endeavors in the years to come;*

**And directs** *that a copy of this citation, sponsored by the Honorable Bruce Smith on March 6, 2002, be transmitted to Three Mile Island Alert, 315 Peffer Street, Harrisburg, Pennsylvania 17102.*



*Bruce Smith*

Bruce Smith, Sponsor

*Matthew Ryan*

Matthew Ryan, Speaker of the House

Attest:

*Ted Mazia*

Ted Mazia, Chief Clerk of the House

# Senate of Pennsylvania



HARRISBURG, PA

## Congratulations

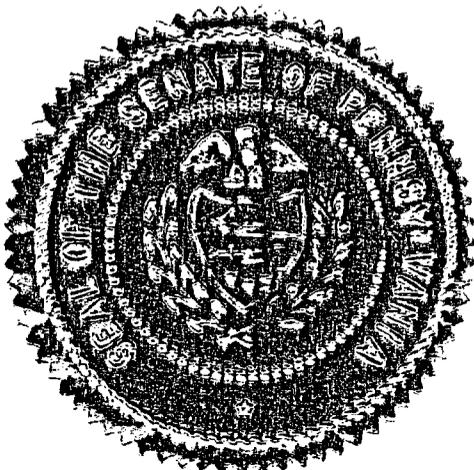
In the Senate, February 12, 2002

Whereas, Three Mile Island Alert is celebrating the momentous occasion of its twenty-fifth anniversary; and

Whereas, Established in 1977, Three Mile Island Alert is a nonprofit citizens' organization dedicated to the promotion of safe energy alternatives to nuclear power. Following the March 28, 1979, accident at Three Mile Island near Middletown, Three Mile Island Alert quickly became central Pennsylvania's primary conduit for accurate information and citizen involvement and played a key role in helping to calm resident's fears while focusing their energies on taking substantive action to improve the nuclear power industry. Throughout its twenty-five-year history, Three Mile Island Alert has endeavored to contribute to the well-being of its local residents and ultimately to all the people of this great Commonwealth.

Now therefore, the Senate of the Commonwealth of Pennsylvania congratulates Three Mile Island Alert as it recommits itself to the ideals and traditions which have sustained it for twenty-five years; offers best wishes for a most rewarding future;

And directs that a copy of this document, sponsored by Senator Jeffrey E. Piccola, be transmitted to Three Mile Island Alert, 315 Peffer Street, Harrisburg, Pennsylvania.



Handwritten signature of Senator Jeffrey E. Piccola.

Senator Jeffrey E. Piccola

Attest:

Handwritten signature of Mark R. Corrigan.

Mark R. Corrigan, Secretary

**Exhibit 2**

## **Exhibit 3**

**Eric Joseph Epstein**  
**4100 Hillsdale Road**  
**Harrisburg, Pennsylvania 17112**  
**Phone: (717)-541-1101**  
**ericepstein@comcast.net**

**EXPERIENCE: ADULT EDUCATION**

- 2002-2007* Principal, EFMR Monitoring Group Incorporated, Harrisburg, Pennsylvania
- 2001-2002* Professor of Holocaust Studies, West Chester University, West Chester, Pennsylvania
- 1992-1999* Visiting Assistant Professor of Humanities, The Pennsylvania State University at Harrisburg
- 1985-2002* Adult Basic Education Administrator and Instructor, Tri County OIC, (Harrisburg, PA); Loysville Secure Treatment Unit (Loysville, PA); The State Correctional Institute at Camp Hill (Camp Hill, PA); and, The Dauphin County Prison (Harrisburg, PA)

**EDUCATION**

- 1992* Masters of Arts, The Pennsylvania State University. Major: Humanities
- 1982* Bachelor of Science, Willamette University. Major: Political Science

**ACKNOWLEDGMENTS**

- 2006* Communicator of the Year: International Association of Business Communicators
- 2006* Public Service Achievement: Common Cause
- 2004* Pioneer Energy Flame: "In Appreciation for Advocating the Importance and Use of Alternative Energies"

## PROFESSIONAL CERTIFICATIONS

- 1998            EQUAL Implementation Training, Pennsylvania Department of Education
- 1990            Solid Waste & Recycling Management, The Pennsylvania State University
- 1989            Corrections' Educator, Pennsylvania Department of Corrections, Training Academy
- 1984            Secondary Education: Social Studies & World Cultures, Millersville University

## REFERENCES

- Adult Education*            **Dr. H. Keith Florig**, Department of Engineering and Public Policy, Carnegie Mellon University, (Pittsburgh, Pennsylvania)
- Dr. Henryk Klepacki**, Department of History, Jagiellonian University, (Krakow, Poland)
- Mr. Jeffry Woodyard**, Executive Director, Tri County OIC (Harrisburg, Pennsylvania)

## REFERENCES

- Energy*                    **Mr. James Byrne, P.E.**, Vice President, GPU Nuclear, (Middletown, Pennsylvania)
- Dr. Michio Kaku**, Department of Physics, City University of New York, ( New York City, New York).
- Mr. Arthur Morris, P.E.**, Chairman, Nuclear Regulatory Commission's Advisory Panel for the Decontamination of the Three Mile Island Unit 2 and former Mayor of Lancaster (Lancaster, Pennsylvania).

## **COMMUNITY APPOINTMENTS**

### *Boards*

- 2004-Present* Board Member, Colonial Crest Association (Lower Paxton Township, PA)
- 1994-1997* President, Historic B’Nai Jacob Synagogue (Middletown, PA)
- 1993-1997* Coordinator, Edna Silberman Holocaust Oral History Project of Central Pennsylvania
- 1993-1997* Chairman, Holocaust Education Committee of the United Jewish Committee (Harrisburg, PA)
- 1993-1995* Chairman, Community Relations Committee of the United Jewish Committee (Harrisburg, PA)

## **ECONOMIC, ENVIRONMENTAL & ENERGY**

### *Boards*

- 2005-Present* Chairman, Stray Winds Area Neighbors (Lower Paxton Township, PA)
- 2003- 2005* Founding Board Member, Greater Middletown Economic Development Corporation, (Middletown, PA)
- 2002- 2005* Founding Board Member, Alternative Fuels Council, (Camp Hill, PA)
- 1999-Present* Board Member, the Sustainable Energy Fund of Central Eastern Pennsylvania, (Allentown, PA)
- 1995-2003* Director, Community Environmental Legal Defense Fund, (Shippensburg, PA)
- 1992-Present* Coordinator, EFMR Monitoring Group, Inc., (Harrisburg, PA)
- 1984-Present* Chairman and Spokesperson, Three Mile Island Alert, Inc., (Harrisburg, PA)
- 1983-1984* Coordinator, the Susquehanna Valley Alliance, (Lancaster, PA)

## MAJOR RESEARCH PUBLICATIONS

- Holocaust Reference* Co-author, Dictionary of the Holocaust: Biography, Geography, and Terminology, (Westport, Connecticut and London, 1997).
- Holocaust Reference* Author of the Appendices The Holocaust Chronicle (Publications International, Ltd., 1999).

## PROFESSIONAL PAPERS & PUBLICATIONS

- Holocaust* Evaluation of "Creation Based Materials" and "Creation Science Evangelism" submitted on behalf of Dennis Baylor to the Hamburg Area School District, (July 2, 2006);
- "Eugenics in American Society" (ARIPPA, Winter, 2003-2004);
- "PETA and the Holocaust" (Op-Ed, Spring, 2003); "Imaging Judaism" (Susquehanna Art Museum, 2001); "The Holocaust and Jewish Culture in Poland," The Memory of the Holocaust in the 21st Century: The Challenge for Education, (Yad Vashem, 1999); "Fit to Be Tried: Maurice Papon and the Vichy Syndrome. Defeat and Collaboration," (Journal of Genocide Research, 1999); "Fit to Be Tried: Maurice Papon and the Vichy Syndrome," (Millersville University, 1998); "The Etymology of the Holocaust" (University of Nebraska at Omaha); "The Legal Path to Judeocide," (Electronic Journal of Annual Holocaust Papers, 1997 & Dickinson Law School, 1995); "Hating the Holocaust," (The Genocide Forum, 1996); "The Etymology of the Holocaust," (Millersville University, 1996); "Springtime in Austria," (Martyrdom and Resistance-Yad Vashem, New York, 1996); "Nazi Medicine," (Friends of the National Parks at Gettysburg, 1995); "Rewriting History: The Holocaust in Contemporary Europe," (Millersville University, 1995); "The Holocaust as A Tourist Industry," (Willamette Scene-Willamette University; 1995 and Martyrdom and Resistance-Yad Vashem, New York, 1994); and, "Law, Ethics and Morality," (Susquehanna University, 1994).

## PROFESSIONAL PAPERS & PUBLICATIONS

- Adult Education* "Adult Education in Correctional Facilities" and "Teaching in the 'Real World:' A Personal Perspective," Pennsylvania Department of Education, The Pennsylvania ABLE Staff Handbook, 1998 Edition, (Harrisburg, PA)
- Assistance Guide* "Where to Go If You Need Help," EFMR Monitoring, 2005 Edition, (Harrisburg, PA)
- Energy & Economic Development* *Publisher, 2005 Biennial Report: The EFMR Monitoring Group, Inc.*
- Energy (1999-2002)* *Publisher, EFMR Monitor: Monitoring Nuclear Power Generation at Peach Bottom and Three Mile island (Harrisburg, PA)*
- Energy (1993-1999)* *Publisher, EFMR Monitor: Monitoring Radiation Trends in the Three Mile Island area (Harrisburg, PA)*

## PROFESSIONAL PAPERS & PUBLICATIONS

- Energy* Consideration of Rulemaking to Reduce the Likelihood of Funding Shortfalls for Decommissioning, U.S. NRC (January 12, 2007); PPL Susquehanna LLC's Application for Susquehanna Steam Electric Station's Application for Renewed Operating Licenses NPF-14 and NPF-22 Docket Nos. 50-387 PLA-6110 and 50-388 Eric Joseph Epstein's Petition for Leave to Intervene, Request for Hearing, and Presentation of Contentions with Supporting Factual Data (January 2, 2007); Testimony of Eric J. Epstein on behalf of Three Mile Island Alert, Inc. - Re: Tritium Levels at Municipal Waste Landfills and in Ground Water Near Nuclear Generating Stations before the Senate Environmental Resources & Energy Committee, Submitted on June 27, 2006; Pursuant to FEMA Rule 44 of the Code of Federal Regulations Part 350 Review and Approval of State and Local Radiological Emergency Plans and Preparedness, Final Rule, September 28, 1983 Sections: 350.13 Withdrawal of Approval - Eric Joseph Epstein's Formal Advisory Notification Demonstrating that the Commonwealth of Pennsylvania's

## PROFESSIONAL PAPERS & PUBLICATIONS

### *Energy*

Emergency Preparedness Plans for Special Populations at the Three Mile Island Nuclear Generating Station and the Peach Bottom Atomic Power Station are Fatally Flawed and Are “No Longer Adequate to Protect Public Health and Safety by Providing Reasonable Assurance that Appropriate Measures Can Be Taken, or Is No Longer Capable of Being Implemented” (June 21, 2006); “The Problem with Nuclear Power: Eric Epstein, TMI Alert, Sustainable Energy Conference at Wilson College, “Life After Cheap Oil: Sustainable Solutions to Global Crises” September 15, 2006); Three Mile Island Alert’s Comments on Pennsylvania’s State Specific Mercury Reduction Rule Before the Environmental Quality Board DEP’s Headquarters, Eric J. Epstein, Chairman, Three Mile Island Alert, Inc. (July 26, 2006); Comments submitted by Eric J. Epstein on behalf of Three Mile Island Alert, Inc. and the EFMR Monitoring Group to the Pennsylvania Public Utility Commission - Re: Docket No. 00061957 Options to Mitigate Potential Significant Increases in Electricity Prices (June 15, 2006); Eric Joseph Epstein’s, *Pro se*, Request for a Public Hearing on the Applications for Approval of the Direct License and Indirect License Transfers of Facility Operating Licenses and Conforming Amendments of Exelon Generation Company, LLC and PSEG Nuclear LLC, at Peach Bottom Atomic Power Station, Units 2 and 3; (Nuclear Regulatory Commission, August 21, 2005); Eric Joseph Epstein’s, *Pro se*, Request for a Public Hearing on the Application for Approval of the Indirect License Transfer of Three Mile Island Nuclear Station, Unit 1 (Nuclear Regulatory Commission, August 15, 2005); Direct Testimony of Eric Joseph Epstein, Joint Application of Peco Energy Company and Public Service Electric and Gas Company for Approval of the Merger of Public Service Enterprise Group Incorporated with and into Exelon Corporation (Pennsylvania Public Utility Commission, June 27, 2005); Emergency Preparedness Survey of Child Care Facilities Located Near Three Mile Island Nuclear Facility (Nuclear Regulatory Commission, March 2, 2005); Direct Testimony of Eric Joseph Epstein, Pennsylvania Public Utility Commission v. PPL Electric Utilities Corporation PA PUC, June 29, 2004);

## PROFESSIONAL PAPERS & PUBLICATIONS

### *Energy*

“Comments on the Nuclear Regulatory Commission’s Request for Public Comment on the Fourth Year of the Reactor Oversight Process”, (Nuclear Regulatory Commission, Washington, D.C., December 30, 2003); “Backed Into A Corner: Cleaning Up Pennsylvania’s Nuclear Power Plants”, (Dickinson College, October 23, 2003); PECO ENERGY COMPANY: NDCA Supplement No. 44, “Decommissioning Cost Analysis for Limerick Generation Station, Peach Bottom Atomic Power Station Units 2 and 3, Salem Generation Station Units 1 and 2,” (PA Public Utility Commission, May 29, 2003); “The Reactor Oversight Process: Deregulated Regulation” (Nuclear Regulatory Commission, Washington, D.C., April 16, 2003); Expert Testimony, PECO Energy Company, Supplement No. 34. Tariff Electric No. 3, “Wind Tariff” (Pennsylvania Public Utility Commission, 2003); Review of the Sustainable Energy Fund of Central Eastern Pennsylvania’s Energy Investments (September 25, 2003); “Security at Three Mile Island: Seven Recommendations to Improve TMI’s Nuclear Plant Security that have Gone Unheeded”, Public Utilities Fortnightly, July 15, 2002); Comments on the Nuclear Regulatory Commission’s Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities; NUREG-0586: Draft Supplement Dealing With Decommissioning of Nuclear Power Reactors, (Nuclear Regulatory Commission, December 28 , 2001); Three Mile Island Alert’s Comments on the Governor’s Energy Task Force Recommendations”, (August 7, 2001); Expert Testimony on Application of PECO Energy Company, for Approval of (1) A Plan of Corporate Restructuring, Including the Creation of A Holding Company and (2) The Merger of the Newly Formed Holding Company and Unicom Corporation (Pennsylvania Public Utility Commission, 2000); Petition to Amend The Financial Assurance Record Keeping for Decommissioning Planning (Nuclear Regulatory Commission, 2000) Presentation at the Environmental Protection Agency: Radiation Information Initiative Team, (Washington, D.C., 1999); Testimony on the Nuclear Energy Institute’s Petition for Rulemaking [SAMA], Nuclear Regulatory Commission, 1999);

## **PROFESSIONAL PAPERS & PUBLICATIONS**

### *Energy*

Testimony on the Proposed Rule Making Amendments; Financial Assurance Requirements for Decommissioning Nuclear Power Reactors, (Nuclear Regulatory Commission, 1997); Expert Testimony on Pennsylvania Power & Light's Proposal for Electric Restructuring (Pennsylvania Public Utility Commission, 1997); Testimony on the "Investigation into Electric Power Competition," (Pennsylvania Public Utility Commission, 1996); Expert Testimony on Pennsylvania Power & Light's 1995 Base Rate Case, (Pennsylvania Public Utility Commission); Testimony on "Hostile Takeovers of Electric Utilities," (Pennsylvania Senate Consumer Protection and Professional Licensure Committee, 1995); "Assessing Risk-Assessment," (University of Tennessee, 1995); "Old and New Forms of Public Participation at the PUC," (Public Utility Commission, University Park, PA, 1995); "Radioactive Scrap Metal: An Environmental Perspective," (University of Tennessee, 1994); "On-Site Storage and the Period Prior to Decommissioning," (League of Women Voters, 1993); Testimony on the Security Intrusion at Three Mile Island (Pennsylvania House of Representatives, 1993); Settlement Agreement with General Public Utilities and the Nuclear Regulatory Commission on Post-Defueling Monitored Storage at Three Mile Island Unit-2, (Atomic Safety & Licensing Board, 1992); Testimony on Chem Nuclear's Siting Plan for A Low-Level Radioactive Waste Site, (Department of Environmental Resources, 1991, 1990, 1989); Testimony on the Cleanup and Decommissioning of Three Mile Island Unit 2, (Nuclear Regulatory Commission, Three Mile Island Advisory Panel for the Decontamination of Three Mile Island, Unit 2, 1994, 1993, 1992, 1991, 1990, 1989, 1988, 1987, 1986, 1985); Testimony on the Pennsylvania Energy Plan, (Lt. Governor Mark Singel, Pennsylvania Energy Office, 1987); Testimony on the Shutdown of Peach Bottom, (Pennsylvania House of Representatives, 1987); Testimony on the Restart of Three Mile Island, (Nuclear Regulatory Commission, Washington, D.C., 1985).

## **Exhibit 4**



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12th Floor  
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717-731-1985 Fax  
www.postschell.com

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Anthony D. Kanagy

akanagy@postschell.com  
717-612-6034 Direct  
File #: 2507-127372

January 29, 2007

Eric J. Epstein  
4100 Hillsdale Road  
Harrisburg, PA 17112

**RE: PPL Electric Utilities Corporation 2006 Competitive Transition  
Charge Reconciliation Filing - Docket No. M-FACE0612**

Dear Mr. Epstein:

Enclosed please find PPL Electric Utilities Corporation's Objections to Interrogatories 1-13 and Instruction (c) of Eric Epstein's Interrogatories Set I in the above-referenced proceeding. As indicated on the certificate of service, copies have been served on all parties in the manner indicated.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Anthony D. Kanagy".

Anthony D. Kanagy

ADK/skr

Enclosures

cc: James J. McNulty (letter and certificate of service only)  
Certificate of Service

ALLENTOWN HARRISBURG LANCASTER PHILADELPHIA PITTSBURGH PRINCETON WASHINGTON, D.C.

A PENNSYLVANIA PROFESSIONAL CORPORATION

CPH 381751V1

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing Objections to Interrogatories 1-13 and Instruction (c) of Eric Epstein's Interrogatories Set I has been served upon the following persons, in the manner indicated, in accordance with the requirements of § 1.54 (relating to service by a participant).

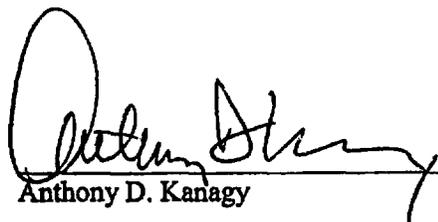
**VIA E-MAIL AND FIRST CLASS UNITED STATES MAIL:**

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Kenneth L. Mickens  
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P.O. Box 3265  
Harrisburg, PA 17105-3265  
[jsimms@state.pa.us](mailto:jsimms@state.pa.us)  
[kmickens@state.pa.us](mailto:kmickens@state.pa.us)

Eric J. Epstein  
4100 Hillsdale Road  
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Date: January 29, 2007

  
Anthony D. Kanagy



3. On December 14, 2006, the Commission issued a Hearing Notice scheduling a hearing in the above-captioned proceeding for February 15, 2007, before Administrative Law Judge Wayne L. Weismandel ("ALJ").

4. PP&L Industrial Customer Alliance ("PPLICA") filed a Petition to Intervene on December 15, 2006.

5. On December 18, 2006, the Office of Trial Staff filed a Notice of Appearance.

6. At its December 21, 2006 Public Meeting, the Commission accepted PPL Electric's CTC reconciliation filing, subject to a public hearing to be held pursuant to Section 1307(e). The Commission also directed PPL Electric to file a tariff supplement implementing revised CTC rates reflecting PPL Electric's projected undercollected position as of December 31, 2006, to be effective January 1, 2007.

7. Pursuant to the Commission's directive, on December 22, 2006, PPL Electric filed Supplement No. 52 to Tariff - Electric Pa. P.U.C. No. 201 which reflected, among other things, PPL Electric's revised CTC rates.

8. On December 29, 2006, the Commission issued a Secretarial Letter accepting Supplement No. 52 and approving the rates contained therein to become effective on January 1, 2007.

9. On January 3, 2007, Mr. Epstein filed a Petition to Intervene in the above-captioned proceeding.

10. PPL Electric filed an Answer to PPLICA's Petition to Intervene on January 8, 2007.

11. On January 19, 2007, Mr. Epstein propounded his first set of interrogatories consisting of 13 separately numbered interrogatories, several with sub-parts, to PPL Electric.

12. By Order dated January 23, 2007, the ALJ granted PPLICA's and Mr. Epstein's Petitions to Intervene.

## II. OBJECTIONS

13. PPL Electric objects to Interrogatory Nos. 1-13 of Mr. Epstein's Set I interrogatories which read as follows:

**Interrogatory 1:** PPL Electric's Restructuring Settlement agreement provides for the collection of authorized nuclear decommissioning costs through the Competitive Transition Costs (CTC). The CTC nuclear decommissioning cost recovery mechanism expires on December 31, 2009. In connection with certain Nuclear Regulatory Commission (NRC) requirements, PPL Susquehanna maintains trust funds to cover certain costs of decommissioning the Susquehanna Steam Electric Station (SSES).

"As of June 30, 2002, these funds were invested primarily in domestic equity securities and fixed-rate, fixed-income securities and are reflected at fair value on PPL's Balance Sheet. The mix of securities is designed to provide returns to be used to fund Susquehanna's decommissioning and to compensate for inflationary increases in decommissioning costs. However, the equity securities included in the trusts are exposed to price fluctuation in equity markets, and the values of fixed-rate, fixed-income securities are exposed to changes in interest rates" (PPL ENERGY SUPPLY LLC; Form: 10-Q.)

- a) Please provide an annual accounting of the amount of CTC revenues collected by PPL for nuclear decommissioning costs by year and customer class.
- b) Please provide an aggregate accounting of the amount CTC revenues collected by PPL for nuclear decommissioning costs by year and customer class.
- c) Please provide actual and projected investment levels for all nuclear decommissioning trust accounts through 2009?

**Interrogatory 2:**

What was the targeted nuclear decommissioning funding levels for the PPL's share of the SSES at the time of the Negotiated Settlement?

**Interrogatory 3:**

What is the current nuclear decommissioning funding target for PPL's share of the Susquehanna Steam Electric Station?

**Interrogatory 4:**

What is the projected funding target for nuclear decommissioning after the rate caps expire on December 31, 2009?

**Interrogatory 5:**

What is the projected gap between the aggregate amount of CTC revenue streams collected through December 31, 2009, and the actual cost to decommission PPL's 90% share of the Susquehanna Steam Electric Station?

**Interrogatory 6:**

Funding scenarios are linked to the following NRC approved modes of nuclear decommissioning: DECOM, ENTOMB and SAFSTOR.

- a) What method(s) are PPL currently utilizing when forecasting nuclear decommissioning costs?
- b) Have the method(s) changed? If so, why and when?

**Interrogatory 7:**

- a) Has PPL moved any of its decommissioning trust funds to the State of Nevada?
- b) If the answer to 7a is yes, please provide an year-by-year and aggregate amount of tax savings realized by moving the accounts from Pennsylvania to Nevada.

**Interrogatory 8:**

- a) What is the current estimate for decommissioning and decontaminating PPL's share of non radioactive components at the SSES?

b) How much of the targeted funding has been accumulated?

c) What is the source of the funding for non-radioactive decommissioning of the SSES?

d) How will PPL reconcile any funding gap in this area?

**Interrogatory 9:**

a) What is the current cost estimates to restore 90% of the SSES to "Greenfield"?

b) How much of the targeted funding has been accumulated?

c) What is the source of the funding for site restoration to Greenfield?

d) How will PPL reconcile any funding gap in this area?

**Interrogatory 10:**

a) Will any of the SSES's decommissioned and decontaminated radioactive scrap metal (RSM) be sold or recycled?

b) What percentage of the RSM proceeds will flow back to rate payers?

c) On a year-by-year basis, how has the RSM been depreciated and accounted for since the Negotiated Settlement?

**Interrogatory 11:**

a) What portion of PPL's nuclear radiological costs will have to be funded after the CTC expires on December 31, 2009?

b) How much of PPL's nuclear radiological costs will have to be funded after the CTC expires on December 31, 2009?

**Interrogatory 12:**

Please break out by percentage and amount how the nuclear trust funds are invested as of June 30, 2006, e.g., domestic equity securities mutual funds, fixed-rate, fixed-income securities, etc.

**Interrogatory 13:**

The Nuclear Regulatory Commission (NRC) defines "electric utilities" as "any entity that generates or distributes electricity and which recovers the cost of electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority (10 CFR § 50.2)."

a) Is PPL Susquehanna currently in compliance with the NRC definition after December 31, 2009?

b) Will PPL Susquehanna be in compliance with the NRC definition after December 31, 2009?

**A. Mr. Epstein's Set I Interrogatories Are Irrelevant Because They Request Information That Is Outside The Scope Of The Proceeding.**

14. PPL Electric objects to all of Mr. Epstein's Set I Interrogatories as irrelevant, because they request information that is outside the scope of this proceeding. As explained below, the scope of this proceeding is limited to a review of the mathematical accuracy of PPL Electric's CTC filing. None of Mr. Epstein's interrogatories relate to the mathematical accuracy of PPL Electric's calculations.

15. The reconciliation of stranded costs is governed by Sections 1307(e) and 2808(f) of the Public Utility Code, 66 Pa. C.S. §§ 1307(e) and 2808(f). Section 2808(f) provides as follows:

**(f) Annual revenue.** – Consistent with section 1307(e) (relating to sliding scale of rates; adjustments), the commission shall establish procedures for the annual review of the competitive transition charge. The review shall reconcile the annual revenues received from the charge with the annual amortization of transition or stranded costs approved by the commission under this section. The commission shall adjust the competitive transition charge based upon underrecovery or overrecovery of the annual amortization amount.

16. As demonstrated by the language of Section 2808(f) quoted above, the scope of this proceeding is limited to reconciling the 2006 CTC revenues received by PPL Electric with

the 2006 CTC recovery approved by the Commission and to adjust for overrecovery or underrecovery of costs. Therefore, under Section 2808(f), the only issue in this CTC reconciliation proceeding is the mathematical accuracy of PPL Electric's calculations.

17. Likewise, the scope of a Section 1307(e) hearing is limited to the mathematical accuracy of the CTC automatic adjustment filing made by PPL Electric. In *Re Annual Statements of Automatic Adjustment Clauses*, 55 Pa. PUC 289, Docket No. M-FCAE0001, Order entered October 2, 1981, the Commission stated as follows with regard to the scope of Section 1307(e) hearings:

We agree with the position of the commission's trial staff and the ALJ that the scope of the instant proceeding under 66 Pa. C.S. § 1307(e) is limited to a review of the arithmetic accuracy of the automatic adjustment statements filed by the respective electric utilities...

55 Pa. PUC 289, at 290.

18. As demonstrated above, the scope of this CTC reconciliation proceeding is very narrow, and strictly limited to the mathematical accuracy of PPL Electric's CTC filing. None of Mr. Epstein's Set I interrogatories concern the mathematical accuracy of PPL Electric's calculations.<sup>1</sup> Thus, they are irrelevant and not reasonably designed to lead to the discovery of admissible evidence. PPL Electric should not be required to answer them.

**B. Interrogatories Regarding The Susquehanna Steam Electric Station, Including Present Or Future Decommissioning Of This Facility, Are Not Related To PPL Electric And Its Provision Of Electric Service To Its Customers.**

19. In addition to the objections stated above, PPL Electric objects to Interrogatories 1.c, and 3-13 as irrelevant, because they are not related to PPL Electric and its provision of

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<sup>1</sup> PPL Electric notes that Interrogatories 1(a) and 1(b) ask for an annual and aggregate accounting of CTC revenues collected by PPL Electric for nuclear decommissioning costs by year and customer class. These questions are irrelevant because the issue in this proceeding involves the reconciliation of the overall CTC amount and not the specific CTC amount related to nuclear decommissioning costs. In addition, PPL Electric does not calculate CTC revenues for nuclear decommissioning costs by customer class.

electric service to its customers. These questions are all related to present or future decommissioning and other issues associated with the Susquehanna Steam Electric Station ("SSES"). PPL Electric does not own SSES and does not own the decommissioning trusts.

20. In conjunction with the restructuring of electric public utility companies under the Electricity Generation Customer Choice and Competition Act, 66 Pa. C.S. Ch. 28 ("Competition Act") and with prior approval by the Commission in its restructuring order, *Application of Pennsylvania Power & Light Company for Approval of its Restructuring Plan Under Section 2806 of the Public Utility Code, et al.*, Docket No. R-00973954, Order entered August 27, 1998, PPL Electric transferred all of its generating assets, including SSES, and exited from the business of generating electricity. The SSES facility was transferred to PPL, Susquehanna, LLC. The decommissioning trusts were included in this transfer.

21. PPL Electric no longer owns Susquehanna and no longer owns the decommissioning trusts. Questions 1.c and 3-13 are all related to these issues. Therefore, in addition to seeking information that is outside the scope of this proceeding, as explained in Section II.A above, these interrogatories are also irrelevant, because they are not related to PPL Electric and its provision of electric service to its customers.

**C. Interrogatories Seeking Information To Support A Recalculation Of Stranded Costs Are Irrelevant.**

22. In addition to the objections stated above, PPL Electric objects to Interrogatories No. 2 and No. 5 because they seek information that is only relevant to support a recalculation of stranded costs. Interrogatory No. 2 asks for information regarding targeted decommissioning funding levels for SSES at the time of the restructuring settlement. This question was relevant in the restructuring proceeding for determining stranded cost levels. However, it is no longer

relevant because stranded costs were set on a once-and-done basis and cannot be recalculated. *ARIPPA v. Pa. PUC*, 792 A.2d 630, 667 (Pa. Cmwlth. 2002).

23. Likewise, Interrogatory No. 5 asks PPL Electric to provide the projected gap between CTC revenue streams and actual decommissioning costs. This question is irrelevant because, even if there is a gap between CTC revenues and decommissioning costs, CTC revenues cannot be increased or decreased to reflect updated decommissioning forecasts. *Id.* Therefore, the difference between CTC revenue streams and actual decommissioning costs is irrelevant.

**D. Instruction C Would Require An Unreasonable Investigation By PPL Electric.**

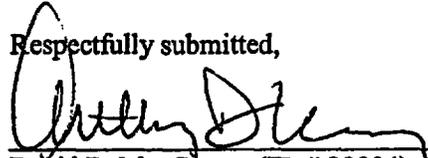
24. In addition to the Interrogatories set forth above, PPL Electric objects to Instruction (c) which reads as follows:

c) All information is to be divulged that is within the knowledge, possession, control or custody of the Respondent or may be reasonably ascertained thereby. The term "PPL", "the Company", or "PPL Electric Utilities Corporation"; as used herein, includes: PPL Electric Utilities Corporation, its attorneys, agents, employees, or other representatives and predecessor or successor attorneys, agents, employees, or other representatives;

25. Instruction (c) would require an unreasonable investigation by PPL Electric because it requires PPL Electric to divulge information from all "predecessor or successor attorneys, agents, employees, or other representatives." In order to comply with this instruction, PPL Electric would be required to investigate whether its many prior employees have information regarding these issues. This would constitute an unreasonable investigation and, therefore, is not permitted. 52 Pa. Code § 5.361(a)(4). In addition, it would be impossible for PPL Electric to provide information from successor attorneys, agents, employees or other representatives, because PPL Electric does not know who those people are until they are hired.

WHEREFORE, for all the foregoing reasons, PPL Electric Utilities Corporation objects to Eric Epstein's Interrogatories, Set I, 1-13 and Instruction (c) and requests that the ALJ excuse it from any requirement to answer them.

Respectfully submitted,



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Of Counsel:

Post & Schell, P.C.

Date: January 29, 2007

Attorneys for PPL Electric Utilities Corporation

**Exhibit 5**



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building  
P.O. Box 2063  
Harrisburg, PA 17105-2063  
January 17, 2006

Office of Waste, Air and Radiation Management

717-772-2724

Nils J. Diaz, Ph.D.  
Chairman  
United States Nuclear Regulatory Commission  
Washington, DC 20555-0001

Re: Disposal and licensing of tritium exit signs

Dear Chairman Diaz:

The Commonwealth of Pennsylvania's Department of Environmental Protection (Department) would like to bring to your attention our concern regarding the improper disposal of generally licensed tritium exit signs in landfills within our state, as well as the rest of the United States. It is my understanding that on a regular basis, NRC receives official reports related to tritium exit signs being (presumably) inadvertently disposed of in RCRA Subtitle D landfills. For example, on December 23, 2005, the state of Wisconsin reported to the NRC (in Event Report No. 42225) that 56 tritium exit signs were lost, containing up to 1,680 curies (Ci) of tritium. This report concludes "...it appears they were sent to a landfill with the general trash." This is a very large quantity of radioactive material improperly disposed of in a landfill. The Department conducted a query of your event-reporting database (NMED) and found that there were roughly 390 such devices reported either lost, missing, stolen, or improperly disposed of between the years 2000 and 2006. However, considering the hundreds of thousands of these devices in use, we suspect the number of reported lost tritium exit signs grossly underestimates those actually lost and disposed of improperly.

Several years ago we promulgated solid waste regulations that required landfills to monitor incoming solid waste for radioactive material and that they develop site-specific response action plans. This very successful program has prevented many generally licensed and orphan gamma-emitting sources from being improperly disposed of in our 50-plus active landfills. However, given the beta decay emission involved, we knew tritium exit signs would not be detected in such monitoring. We, therefore, provided guidance to these facilities regarding recovery of tritium exit signs, should they be discovered visually. This new active radiation monitoring program at our landfills has also prompted us to perform a landfill leachate survey with subsequent radiological analysis of samples in late 2004. The radiological analysis of the collected leachate samples was comprehensive and included tritium.



CHAIRMAN REC'D  
06 JAN 23 AM 10:25

8307  
USA

Enclosed for your reference is a copy of a report our support contractor provided to us in October 2005. This report is also available on our Department's Bureau of Radiation Protection web site at <http://www.depweb.state.pa.us>, Keyword: "Radiation," go to the Radiation Control Division, and the sub-page on "Monitoring of Radioactive Materials in Solid Waste." A review of the data in this report indicates that radioactive materials normally occurring in the environment (i.e., natural and residual fallout) will account for all the gross radioactivity results except for tritium. As you will note from the first graphic in Attachment A of the report, tritium concentrations ranged from background to nearly 100,000 picocuries per liter (pCi/L). In the fall of 2004, over 90% of the landfill leachate samples had detectable tritium, with over 50% having levels above the U.S. Environmental Protection Agency's (EPA) community water systems Maximum Contaminant Level (MCL) of 20,000 pCi/L (40 CFR Chapter 1 Part 141.66). Another round of landfill leachate sampling and analysis was performed in late 2005 for tritium only, with similar preliminary results and one landfill above 180,000 pCi/L.

In view of the amount of tritium that is being detected by our Pennsylvania landfill leachate monitoring program, it is apparent to us that many licensees possessing tritium exit signs are not returning the devices to the manufacturer or otherwise providing for proper disposal. This conclusion is based on the fact that there is no other source of tritium in the private sector that could be causing such levels of tritium in leachate. That is, each exit sign can contain up to 20 Ci of tritium, or 20,000,000,000,000 pCi, thus, one improperly disposed of exit sign can easily cause the tritium in leachate concentrations we're observing. Further, it is our understanding that other states and countries outside the U.S. have seen similar tritium levels in landfill leachate. In fact, the EPA recently highlighted tritium exit signs as a disposal problem in its October 2004 training CD-ROM "Identifying Radioactive Sources at the Demolition Site."

In light of the fact that there are alternative methods available for emergency lighting, we feel that the NRC should re-evaluate the conditions of use for tritium exit signs as a generally licensed source. Specifically, an immediate evaluation of the safety criteria presented by manufacturers of these tritium exit signs would be prudent, as we believe the data in our report indicates the condition in 10 CFR32.23(a) may not be met, and the related dose limit in the organ dose table in 10 CFR32.24 (Column I) could be exceeded under reasonable leachate discharge exposure scenarios. It is also our opinion that the labeling requirements for these devices are inadequate to alert the licensee's personnel that it contains radioactive tritium, and the device requires proper disposal. The Department believes it would be reasonable for the NRC to issue a condition by order to all generally licensed users of tritium exit signs, indicating that they inventory and report to the NRC, on an annual basis, the number and location of tritium exit signs in their possession. It is apparent from the results of our landfill leachate survey report that the NRC's current regulatory program for these tritium exit signs is not adequate to prevent the improper disposal of these devices. Thus, with all due respect, we recommend the NRC promptly re-evaluate the regulatory and licensing aspects of these tritium exit signs.

Nils J. Diaz, Ph.D.

- 3 -

January 17, 2006

Should you or your staff have any questions about our landfill leachate study, or other radiation protection matters in the Commonwealth, please contact me by e-mail at [tfidler@state.pa.us](mailto:tfidler@state.pa.us) or at the telephone number above, or contact Mr. David Allard, Director of the Bureau of Radiation Protection, by e-mail at [djallard@state.pa.us](mailto:djallard@state.pa.us) or by telephone at 717-787-2480. Thank you for your consideration of our recommendations.

Sincerely,



Thomas K. Fidler  
Deputy Secretary

Enclosure

cc: (with no enclosure)  
Secretary McGinty  
David J. Allard, BRP  
Samuel J. Collins, NRC, Region I  
George Pangburn, NRC, Region I  
Robert Bores, NRC, Region I  
Janet M. Schleuter, NRC, STP  
Stephen L. Johnson, EPA Administrator  
Donald Welsh, EPA, Region 3

## **Exhibit 6**



# Susquehanna River Basin Commission

*a water management agency serving the Susquehanna River Watershed*

## PROJECT INFORMATION

### 1. Applicant Information:

Applicant Name or Registered Fictitious Name PPL Susquehanna, LLC  
Parent Corporation Name, if different PPL Corporation  
Mailing Address Two North Ninth Street  
GENPL5  
City Allentown State PA Zip 18101-1179  
Contact Person Jerome S. Fields, REM Title Sr. Environmental Scientist - Nuclear  
Telephone (610) 774-7889 Fax (610) 774-7782 E-Mail jsfields@pplweb.com

### 2. Preparer (Hydrogeologist/Engineer):

Name Jan C. Phillips, P.E.  
Title \_\_\_\_\_  
Company Jan C. Phillips, P.E.  
Address 2611 Walnut Street  
Allentown, PA 18104-0160  
Phone (610) 821-0160 Fax (610) 821-0160  
Signature *Jan C. Phillips*  
Date 12-19-06 E-Mail Address jcphllps@enter.net

### 3. Project Engineer:

Name N/A  
Title \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
Phone ( ) \_\_\_\_\_ Fax ( ) \_\_\_\_\_  
Signature \_\_\_\_\_  
Date \_\_\_\_\_ E-Mail Address \_\_\_\_\_

4. Location of proposed source(s), if applicable:

State Pennsylvania County Luzerne  
Municipality Salem Township  
Latitude N 41° 05' 12.4" Longitude W 76° 07' 53.2"

5. State, county, or other regulatory/permitting contacts:

Agency N/A Department \_\_\_\_\_  
Name \_\_\_\_\_ Position \_\_\_\_\_  
Permit/Area of Concern: \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Phone \_\_\_\_\_ E-Mail \_\_\_\_\_

Agency \_\_\_\_\_ Department \_\_\_\_\_  
Name \_\_\_\_\_ Position \_\_\_\_\_  
Permit/Area of Concern: \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Phone \_\_\_\_\_ E-Mail \_\_\_\_\_

Agency \_\_\_\_\_ Department \_\_\_\_\_  
Name \_\_\_\_\_ Position \_\_\_\_\_  
Permit/Area of Concern: \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Phone \_\_\_\_\_ E-Mail \_\_\_\_\_

**PPL Susquehanna, LLC**  
Two North Ninth Street  
Allentown, PA 18101-1179  
Tel. 610.774.7889  
jsfields@pplweb.com



December 20, 2006

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

Attn: Project Review Coordinator

**PPL SUSQUEHANNA, LLC**  
**APPLICATION FOR SURFACE WATER WITHDRAWAL**  
**REQUEST TO MODIFY APPLICATION 19950301**  
**EPUL- 0578**

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Dear Mr. Swartz:

Enclosed for the Susquehanna River Basin Commission's (Commission's) approval please find an application to increase the existing maximum daily surface water withdrawal at the Susquehanna Steam Electric Station (SES) from approximately 58 million gallons per day (MGD) to 66 MGD. This application includes a proposed water use monitoring plan. In addition, PPL Susquehanna, LLC hereby requests modification of Application 19950301 dated March 9, 1995 to eliminate the 30-day average consumptive water use limit of 40 MGD at the Susquehanna SES.

**Background**

The Susquehanna SES is a two-unit, baseload, boiling-water-reactor electric generating station. Unit 1 and Unit 2 each have a present electrical capacity of 1,190 MWe. Ownership of the Susquehanna SES is shared by PPL Susquehanna, LLC, Berwick, PA (90 percent) and Allegheny Electric Cooperative Inc., Harrisburg, PA (10 percent). PPL Susquehanna is a subsidiary of PPL Generation, LLC, which in turn is an indirect subsidiary of PPL Corporation. PPL Susquehanna (hereinafter "PPL") is the licensed operator of the Susquehanna SES.

The Susquehanna SES is located on the west bank of the Susquehanna River, in Salem Township, Luzerne County, PA. The largest community within 10 miles is the Borough of Berwick, PA located approximately five miles southwest of the station. Susquehanna SES property (owned by PPL and Allegheny Electric) is 1,574 acres in area; 1,173 acres lie to the west of U.S. Route 11 and contain most of the station facilities, and 401 acres lie between U.S. Route 11 and the river and comprise the Susquehanna Riverlands Recreation Area. The Susquehanna Riverlands Recreation Area includes

natural and recreational areas. Also, PPL owns an additional 717 acres of mostly undeveloped property on the east side of the river.

In September 2006, PPL submitted an application to the U.S. Nuclear Regulatory Commission (USNRC) to renew the Susquehanna SES operating licenses for an additional 20 years (Unit 1 to 2042 and Unit 2 to 2044). In October 2006, PPL submitted to the USNRC an application for an Extended Power Uprate (EPU) for both units. The EPU will occur between the second quarter 2008 and the second quarter 2010 and will increase electrical generation up to approximately 1,300 MWe for each unit. Major EPU modifications associated with the station systems will be initiated during the March 2008 or subsequent refueling outages; the river water make-up, circulating water, and blowdown systems will not be modified for the EPU.

The Susquehanna SES withdraws water from the Susquehanna River through a river intake (River Intake Structure) along the west bank of the river adjacent to the station. The River Intake Structure includes four operating pumps, each with an individual design capacity of 13,500 gallons per minute (gpm). The operational combined capacity of the four pumps is approximately 45,000 gpm but can vary depending on river conditions and the conditions of the pumps. Blowdown from the station's cooling water system is discharged back to the river through a diffuser pipe located on the river bottom downstream of the river intake.

#### **Application to Increase Surface Water Withdrawal from the Susquehanna River**

The estimated maximum daily rate of river water withdrawal for the existing station is approximately 58 MGD. This withdrawal preceded the effective date (November 1995) of the Commission's surface water withdrawal regulations and, therefore, did not require the approval of the Commission. PPL estimates that the maximum daily post-EPU withdrawal will be no greater than 65.35 MGD. Accordingly, PPL submits the enclosed application for a surface water withdrawal of 66 MGD.

Information on the environmental impact of the EPU may be found in two reports prepared by PPL and submitted to the USNRC, copies of which were given to Commission staff at a meeting on November 13, 2006:

- "Supplemental Environmental Report – Extended Power Uprate" dated March 2006; and
- "Environmental Report – Operating License Renewal Stage – Appendix E" (Section 3.1.2 – Cooling and Auxiliary Water Systems) dated September 2006; see the following website for the entire report:

<http://www.nrc.gov/reactors/operating/licensing/renewal/applications/susquehanna.html>

## **Water Use Monitoring Plan**

ATTACHMENT C to the enclosed application is a proposed Water Use Monitoring Plan. PPL will continue using the cooling tower performance diagram to estimate cooling tower evaporation. Total cooling tower water loss will be estimated by adding an allowance for cooling tower drift loss to the cooling tower evaporation. Total surface water withdrawal will be determined as the sum of (a) the total cooling tower water loss, (b) the cooling tower blowdown, and (c) the makeup flow to the emergency spray pond. Daily volumes of cooling tower water loss and total surface water withdrawal will be reported to the Commission quarterly.

The River Intake Structure includes flow meters to measure withdrawal. However, metering of the withdrawal has been inaccurate due mainly to corrosion and fouling of the intake pipes. The intake pipes are made of carbon steel, and PPL is evaluating replacement of sections of this pipe with stainless steel pipe to minimize flow meter measurement error. Following replacement of sections of pipe from two of the four make-up pumps, it may be possible during one-unit outages to operate the station with those two pumps and to compare the metered withdrawal flow to the calculated sum of cooling tower water loss, cooling tower blowdown, and emergency spray pond makeup. If the pipe replacement project proceeds and withdrawal quantities determined by the two methods are comparable, then PPL will use the metered withdrawal to periodically verify the calculated withdrawal based on the sum of cooling tower water loss, cooling tower blowdown, and emergency spray pond makeup. If the metered withdrawal is significantly different from the calculated withdrawal, PPL will discuss with the Commission the appropriate next steps for measuring withdrawal. PPL will keep the Commission apprised of these activities.

### **Modification of Consumptive Water Use Application 19950301**

On March 9, 1995 (Application No. 19950301), the Commission approved the consumptive water use at the Susquehanna SES up to a 30-day average of 40 MGD, not to exceed a daily usage of 48 MGD. As discussed with Commission staff at the November 13, 2006 meeting, PPL requests a modification to this approval to eliminate the 40 MGD 30-day average limit. This is consistent with other recent consumptive water use application modifications.

### **Comments**

PPL does not expect the maximum daily river water withdrawal to exceed 65.35 MGD. For purposes of this application, PPL is requesting approval of a maximum daily river water withdrawal of 66 MGD. Also, PPL does not expect the maximum daily consumptive water use to exceed the currently approved 48 MGD. In the event of an apparent exceedance, PPL requests an opportunity to evaluate the problem and to discuss it with the SRBC staff prior to the Commission issuing a notice of violation.

**Fees**

Based on the Commission's Project Fee Schedule effective through December 31, 2006, the fees for the Susquehanna SES permitting activities requested herein are as follows:

• Surface Water Withdrawal Application (66 MGD):	\$186,000.00
• Project Modification (elimination of 30-day average consumptive water use limit of 40 MGD):	<u>\$2,500.00</u>
Total	\$188,500.00

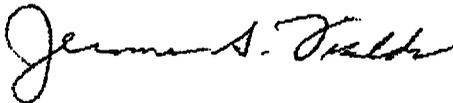
Payment of these fees is being sent to the Commission under separate correspondence.

**Public Notice**

PPL is proceeding to issue public notice of this application in accordance with the Commission's regulations. Notifications will be made to Luzerne County, Salem Township, a local newspaper, and property owners in Salem Township either contiguous to or nearby the Susquehanna SES.

PPL requests the Commission's prompt review and approval of the enclosed surface water withdrawal application and the request for modification of the approved consumptive water use. Should you or your staff have any questions, please contact me at (610) 774-7889 or by e-mail at [jsfields@pplweb.com](mailto:jsfields@pplweb.com). Thank you for your consideration.

Sincerely,



Jerome S. Fields, REM  
Senior Environmental Scientist – Nuclear

Enclosure: SRBC Surface Water Withdrawal Application

Cc Delivered via electronic mail to:

Ms. P. A. Ballaron	SRBC
Mr. T. W. Beauduy	SRBC
Mr. M. G. Brownell	SRBC
Mr. A. D. DeHoff	SRBC

X:\Special Projects\EPU Project\EPU\EPU.s

# Susquehanna River Basin Commission



*a water management agency serving the Susquehanna River  
Watershed*

**Surface Water Withdrawal Application for up to 66 MGD at the existing Susquehanna Steam Electric Station (SES) on a maximum day, in conjunction with the Extended Power Uprate (EPU). ATTACHMENT C to this application is a proposed Water Use Monitoring Plan.**

**1. Applicant Information:**

Company Name: PPL Susquehanna, LLC (PPL)

Mailing Address: Two North Ninth Street – GENPL5  
Allentown, PA 18101-1179

Contact Person: Jerome S. Fields, REM, Senior Environmental Scientist-Nuclear

Telephone: (610) 774-7889 Fax: (610) 774-7782 E-mail: [jsfields@pplweb.com](mailto:jsfields@pplweb.com)

**2. a. Location of sources:**

State: Pennsylvania

County: Luzerne

Municipality: Salem Township

- b. You must attach a copy of a USGS 7 1/2 Minute Quadrangle map indicating location of proposed intake(s), all existing project sources, and any water storage facilities.

ATTACHMENT A to this application is an electronically formatted copy of adjoining USGS quadrangles Berwick (PA) and Sybertsville (PA) showing the locations of the facilities, water resources and discharges associated with this application.

- 3. Purpose of withdrawal:** The Susquehanna Steam Electric Station (SES) is an existing, two unit, 2,380-megawatt electrical (MWe), nuclear-fueled electric generating station. An Extended Power Uprate (EPU) is planned for the Susquehanna SES to be implemented in stages from the second quarter 2008 through the second quarter 2010. The EPU is expected to increase the station output to approximately 2,600 MWe.

The Susquehanna River is the primary source of water for the Susquehanna SES and provides essentially all of the cooling water associated with the generation of electricity. The withdrawal of surface water from the Susquehanna River for commercial operation of the Susquehanna SES began in 1983. Water is pumped from the river at an intake

adjacent to the station. The River Intake Structure contains four pumps, each rated at 13,500 gpm. The estimated maximum daily withdrawal by the existing station is approximately 58 MGD. The maximum daily withdrawal from the river is expected to gradually increase to approximately 65 MGD as the EPU is implemented; however, this application is being submitted for 66 MGD. The increased withdrawal will not require modification to the intake, the pumps or the cooling system.

4. Source(s) from which withdrawal is being requested:

Name of Source	Quantity of Withdrawal Requested		Safe Yield or Q7-10 Low Flow <sup>2</sup> at Point of Taking (mgd <sup>1</sup> )	Drainage Area (square miles)	Location of Taking Point (latitude/longitude)
	Maximum 30-Day Average (mgd <sup>1</sup> )	Maximum Day (mgd <sup>1</sup> )			
Susquehanna River	NA	66 MGD Note 3	Note 4	Approx. 10,200 sq. miles Note 5	lat: N41°05'12.4" long: W76°07'53.2"
<b>Total</b>	NA	66 MGD Note 3	Note 4		

<sup>1</sup> mgd = million gallons per day

<sup>2</sup> Use acceptable hydrologic practices in determining 7-day, 10-year low flow.

<sup>3</sup> Quantities shown do not include allowance for measurement error.

<sup>4</sup> A Q7-10 flow of 814 cfs (525 MGD) at the USGS gage at Wilkes-Barre (No. 01536500) has been used by the Commission in determining the need for consumptive use compensation releases from Cowanesque Reservoir. The Wilkes-Barre gage is approximately 20 miles upstream from the SSES river intake. At the Wilkes-Barre gage, the 90-percent exceedance flow is 1,670 cfs, the minimum seven-day low flow is 546 cfs (September 1964), and the minimum daily flow is 532 cfs (September 1964).

<sup>5</sup> The drainage area at the Wilkes-Barre gage is 9,960 sq. miles. The drainage area at the USGS gage at Danville (No. 01540500), approximately 30 miles downstream, is 11, 200 sq. miles.

5. Prior or pending state or federal permits:

Permit Name	Status <sup>1</sup>	Agency	Permit Issue Date	Permit Number
Safe Drinking Water Permit	Prior	PaDEP	2/17/89	2400994
	"	"	12/4/85	2400995
	"	"	12/4/85	2400999
	"	"	12/4/85	2400938
Dams Permit	N/A			
Encroachment or Water Obstruction Permit (intake and discharge diffuser)	Prior	USACOE & PaDEP	9/13/06	CENAB-OP-RPA 06-10107-P12; E40-195
	Prior	"	8/31/88	CENAB-OP-RR 87-1767-4;E40-192
Water Allocation/Appropriation	Prior	SRBC	3/9/95	19950301 Note 3

Permit				
Other (NPDES)	Prior	PaDEP	9/1/05	NPDES PA-0047325
Other (Operating license)	Prior	USNRC	7/17/82 3/23/84	NPF-14 NPF-22
	Pending	USNRC	Note 2	NPF-14 NPF-22

<sup>1</sup> If not applicable list (NA); if pending, (P); if required but not applied for, (R)

<sup>2</sup> An application was submitted to the US Nuclear Regulatory Commission on Sept. 13, 2006 to renew operating licenses NPF-14 and NPF-22 for an additional 20 years.

<sup>3</sup> See also contract between the Commission and Pennsylvania Power & Light Company for development of water supply storage in Cowanesque Reservoir, dated June 30, 1986.

6. Show by calculation how the "Quantity of Withdrawal Requested" was determined. Describe how sufficient this allocation will be in meeting the future needs of this project. Describe alternative sources of supply considered in lieu of requesting a new or increased allocation from the sources listed in Application Section 4. (Attach additional sheets, as necessary.)

See ATTACHMENT B.

7. Existing and projected total water use:

Total Project Water Usage <sup>1</sup>	Existing (mgd) <sup>2</sup>	Projected (mgd) <sup>3</sup> for Design Year 2008 and beyond
Average Daily Water Demand	42 MGD Note 5	46 MGD in 2008 49 MGD in 2009 52 MGD in 2010 and beyond Notes 7 and 8
Maximum Daily Water Demand	58 MGD: Note 6	60 MGD in 2008 64 MGD in 2009 65.35 MGD in 2010 and beyond Notes 7 and 9
System Capacity <sup>4</sup>	The river intake has four pumps, each rated at 13,500 gpm. However, the system capacity with all four pumps operating is approximately 45,000 gpm but can vary depending on river conditions and the conditions of the pumps.	The existing system capacity is adequate and will not need to be increased for the EPU.

- <sup>1</sup> Project water usage should be on an annual basis, unless the application is for a seasonal operation. For seasonal uses, indicate the duration of the use (the number of months on which the average is based).
- <sup>2</sup> For new projects, the existing use should be the proposed use during the first year of operation.
- <sup>3</sup> The projected use should be for 25 years in the future (design year). If the project duration is less than 25 years, indicate the year for which projections were made.
- <sup>4</sup> The existing system capacity should not include the proposed sources unless the application is for a new project having no prior withdrawal.
- <sup>5</sup> Average usage, years 2002-2005: cooling tower water loss (29.5 MGD, from cooling tower performance diagram) + average cooling tower blowdown (11.8 MGD, metered) + emergency spray pond makeup (0.4 MGD, estimated) = 41.7 MGD.
- <sup>6</sup> Maximum daily usage, years 2002-2005: cooling tower water loss (40 MGD, from cooling tower performance diagram) + maximum cooling tower blowdown (17.3 MGD, metered) + emergency spray pond makeup (0.4 MGD, estimated) = 57.7 MGD.
- <sup>7</sup> Estimates do not include allowance for measurement error.
- <sup>8</sup> Annual average consumptive water use upon completion of the EPU is expected to be 37 MGD.
- <sup>9</sup> Maximum daily consumptive water use upon completion of the EPU is expected to be 48 MGD.

8. Existing sources of water:

- a. Wells – Well system began operation in 1974 to provide domestic water supply and (wells TW-1 and TW-2) miscellaneous station purposes excluding condenser cooling. The EPU will not affect the withdrawal or use of groundwater at the Susquehanna SES.

Well Identification	Frequency of Use <sup>1</sup>	Purpose <sup>2</sup>	Well Depth (ft)	Cased Depth (ft)	Screened Interval (ft to ft)	Pump Capacity (mgd)	Number of Days Used During Calendar Year	Metered (yes/no)	Average Daily Withdrawal (mgd)	Safe Yield MGD <sup>3</sup>
PWS2400994 (TW-1)	E	Domestic + Misc Station	75	Unknown	Unknown	0.07 (50 gpm)	0	Yes	0	0.072
PWS2400994 (TW-2)	R	Domestic + Misc Station	75	Unknown	Unknown	0.22 (150 gpm)	365	Yes	0.094	0.216
PWS2400999	R	Domestic - Energy Information Center	100	Unknown	Unknown	N/A	365	No	Note 4	0.022
PWS2400995	R (Apr-Oct)	Domestic - Riverlands	105	Unknown	Unknown	N/A	200	No	Note 4	0.043
PWS2400938	R	Domestic - West Bldg.	55	Unknown	Unknown	N/A	365	No	Note 4	0.043
Total									<0.114	0.396

<sup>1</sup> Indicate if well is used on Regular (R), Auxiliary (A), or Emergency (E) basis.

<sup>2</sup> Indicate purpose such as potable supply, non-contact cooling, or water quality remediation.

<sup>3</sup> Provide method of computation or submit copies of pumping test data. Data listed in PaDEP Brief Description forms; method(s) not listed.

<sup>4</sup> The combined withdrawal from these three nearby wells is estimated to be below 0.02 MGD. These wells are not used for station operation but for domestic use at various nearby facilities associated with the station.

9. Raw water ponds, lakes, intake dams, and storage dams (existing and/or proposed):

Name	Year Constructed	Year of Last Sedimentation Survey	Storage Capacity (mg)	Surface Area (acres)	Drainage Area (sq mi)	Release Works <sup>1</sup>	
						(yes)	(no)
Lake Took-A-While Note 2	1978-1979	March 1999	Est. 30	Est. 30 Note 3	Estimated 0.53		Note 4

<sup>1</sup> Does the dam have facilities to provide a release of water to the stream when water is not flowing over the spillway or top of dam? If yes, describe length, diameter, depth, valving, etc.

<sup>2</sup> Lake Took-A-While is located within the Riverlands Recreation Area and is solely a recreation facility.

<sup>3</sup> Surface area has varied in different reports from 24 to 35 acres. For the License Renewal environment report 30 acres was used for area.

<sup>4</sup> The spillway has stop logs that can be removed and replaced manually to control lake level.

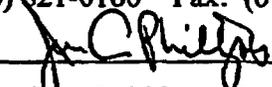
10. Preparer:

Name: Jan C. Phillips, P.E.

Address: 2611 Walnut Street

Allentown, PA 18104-6230

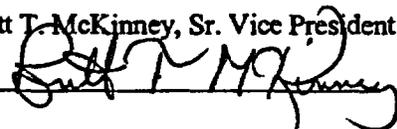
Phone: (610) 821-0160 Fax: (610) 821-0160

Signature 

Date: December 19, 2006 E-mail Address: [jcphllps@enter.net](mailto:jcphllps@enter.net)

11. Applicant:

Name: Britt T. McKinney, Sr. Vice President & Chief Nuclear Officer

Signature  Date: December 20, 2006

b. Other sources of water (stream intakes, interconnections, reservoirs, springs, etc.):

Name	Description	Frequency of Use <sup>1</sup>	Purpose <sup>2</sup>	Drainage Area, If Applicable (square miles)	Existing Pump Capacity <sup>3</sup> (mgd)	Number of Days Used During Calendar Year	Metered (yes/no)	Average Daily Withdrawal (mgd)	Safe Yield or Q7-10 Low Flow <sup>4</sup> (mgd)
None									
<b>Total</b>									

<sup>1</sup> Indicate if source is used on Regular (R), Auxiliary (A), or Emergency (E) basis.

<sup>2</sup> Indicate purpose such as potable supply, process water, non-contact cooling, or irrigation.

<sup>3</sup> If gravity-fed, give maximum hydraulic capacity and label as such.

<sup>4</sup> Provide method of computation for 7-day, 10-year low flow for run-of-stream sources.



## ATTACHMENT B

PPL Susquehanna, LLC  
Application to SRBC for Surface Water Withdrawal  
December 2006

Application Section 6  
Determination of Quantity of Withdrawal Requested

The Quantity of Withdrawal Requested is 66 MGD on a maximum day. This amount is the sum, to the next higher MGD, of (a) the estimated maximum daily water loss from the cooling towers (evaporation plus drift allowance) following full implementation of the Extended Power Uprate, (b) the cooling tower blowdown rate associated with the estimated maximum daily cooling tower loss, and (c) the estimated makeup flow to the emergency spray pond, less (d) a small contribution of well water to the cooling water flow. The Quantity of Withdrawal Requested does not include an allowance for flow measurement error.

Cooling tower evaporation is determined from the designer's cooling tower performance diagram (Exhibit A hereto). Cooling tower evaporation as a percentage of the cooling tower water flow is a function of wet-bulb temperature, relative humidity and cooling range. The post-EPU maximum daily consumptive water use has been determined assuming the following conditions:

Wet-bulb temperature (WBT): 77.0°F

Relative humidity (RH): 40 percent

Cooling range: 35.7 F degrees

Cooling tower water flow: 511,000 gpm per tower

The selected environmental conditions (WBT and RH) are considered to be conservative for estimating the maximum daily evaporative loss.

The cooling tower water flow combines circulating water flow (484,000 gpm) and service water flow (27,000 gpm). The cooling range (35.7 F degrees) was calculated based on the combined heat contributions of the circulating and service water flows.

From Exhibit A, for the assumed WBT, RH and cooling range, the rate of evaporation expressed as a percentage of the cooling tower water flow is 3.22 percent. Thus, the evaporative loss per cooling tower expressed in gpm is:

$$\text{Evaporative loss per tower} = 511,000 \text{ gpm} \times 0.0322 = 16,454 \text{ gpm.}$$

The cooling tower manufacturer's estimate of the rate of cooling tower drift loss is 0.02 percent of the cooling tower water flow. Thus, the drift loss per cooling tower expressed in gpm is:

$$\text{Drift loss per tower} = 511,000 \text{ gpm} \times 0.0002 = 102 \text{ gpm.}$$

Thus, the estimated post-EPU maximum daily water loss from the two cooling towers combined, expressed in MGD, is:

$$2 \times (16,454 \text{ gpm} + 102 \text{ gpm}) \times 0.00144 \text{ MGD/gpm} = 47.68 \text{ MGD.}$$

Cooling tower blowdown comprises most of the non-consumptive water use at the Susquehanna SES. The blowdown rate is a function of water chemistry, among other things. The cooling tower blowdown rate is approximated as:

$$\text{Blowdown per tower} = [\text{evaporation} / (\text{concentration factor} - 1)] - \text{drift.}$$

Assuming a concentration factor of 3.7, the blowdown rate per tower expressed in gpm is:

$$[16,454 \text{ gpm} / (3.7 - 1)] - 102 \text{ gpm} = 5,992 \text{ gpm.}$$

Thus, the estimated blowdown rate corresponding to the maximum daily evaporative loss for the two towers combined, expressed in MGD, is:

$$2 \times 5,992 \text{ gpm} \times 0.00144 \text{ MGD/gpm} = 17.26 \text{ MGD.}$$

The makeup flow to the emergency spray pond is estimated to be 300 gpm. Expressed in MGD, the estimated emergency spray pond makeup is:

$$300 \text{ gpm} \times 0.00144 \text{ MGD/gpm} = 0.43 \text{ MGD.}$$

A flow of approximately 0.02 MGD originating from the station wells is added to the cooling water system.

Thus, the total post-EPU maximum daily surface water withdrawal is estimated as:

47.68 MGD	Cooling tower evaporation and drift loss
+ 17.26 MGD	Cooling tower blowdown
+ 0.43 MGD	Emergency spray pond makeup
- 0.02 MGD	Flow from station wells
≈ 65.35 MGD	Maximum daily surface water withdrawal

or 66 MGD, to the next higher MGD.

The "Quantity of Withdrawal Requested" shown in the table of Item No. 4 of the application is the 66 MGD estimated maximum daily surface water withdrawal rate. This 66 MGD is anticipated to be adequate for the foreseeable life of the Susquehanna SES.

No alternative sources for the amount of additional water needed by the Susquehanna SES following the EPU were considered, nor would any be practicable.



## ATTACHMENT C

PPL Susquehanna, LLC  
Application to SRBC for Surface Water Withdrawal  
December 2006

### Proposed Susquehanna SES Water Use Monitoring Plan

This Plan provides for the metering and measurement of data necessary to determine, for reporting to the Commission, the following water quantities at the Susquehanna SES:

- Daily cooling tower water loss (evaporation and drift loss) for each generating unit; and
- Daily surface water withdrawal from the Susquehanna River.

Exhibit A to this Plan is a station water flow schematic diagram (“SSES Water Flow Diagram – Post-EPU Maximum”) showing the facilities and flows indicated herein.

The daily surface water withdrawal is determined from the estimated daily cooling tower water loss, the metered cooling tower blowdown, and the estimated makeup flow to the emergency spray pond.

### COOLING TOWER WATER LOSS

#### *Meteorological Data*

PPL maintains and operates a meteorological station on the Susquehanna SES site. Wet-bulb temperature (WBT) and Relative humidity (RH) are calculated using temperature and dew point. Daily averages of hourly temperature and dew point readings are used to calculate daily WBT and RH. Temperature is accurate within  $\pm 0.9^{\circ}\text{F}$  and dew point to  $\pm 2.7^{\circ}\text{F}$ .

#### *Cooling Tower Water Flow*

The total water flow to each cooling tower is the sum of the respective generating unit's circulating water flow (approximately 95 percent) and the unit's service water flow (approximately 5 percent). The rate of circulating water flow is measured continuously, by ultrasonic metering at Unit 1 and by metering power inflow to the circulating water pumps at Unit 2. The rate of service water flow is assumed to be a constant 27,000 gpm at each unit. Measurement of the circulating water flow is accurate to within  $\pm 2.5$  percent.

### *Cooling Range*

The cooling range is the difference between the hot-water temperature and the cold-water temperature in the cooling water flow. The cooling range at Susquehanna SES is determined from the hot-water temperature and the cold-water temperature in the circulating water flow; this assumes that the temperature difference in the circulating water flow is representative of the temperature difference in the service water flow. The hot-water temperature and the cold-water temperature in the circulating water flow are measured continuously. According to manufacturer specifications, the temperature measurements are accurate to within  $\pm 2$  percent.

### *Cooling Tower Evaporation*

PPL believes that the most accurate way to estimate cooling tower evaporation at the Susquehanna SES is by use of the cooling tower performance diagram (Exhibit A to ATTACHMENT B of this application). The cooling tower performance diagram was prepared by the cooling tower designer and updated by PPL to indicate the expected post-EPU maximum cooling tower water flow rate (511,000 gpm per generating unit). The diagram permits cooling tower evaporation (gpm) to be estimated from the values of WBT, RH, cooling range and cooling water flow rate. To estimate daily evaporation, the daily average WBT, RH, cooling range and cooling water flow rates are used.

### *Cooling Tower Drift Loss*

The cooling tower manufacturer estimates that drift loss rate is equal to 0.02 percent of the cooling tower water flow rate. The nominal EPU cooling tower water flow rate is 511,000 gpm per unit, so that the estimated drift rate is 102 gpm per tower. For purposes of estimating actual loss, it will be sufficiently accurate to assume a constant drift loss of 100 gpm or 0.15 MGD per tower when the respective generating unit is on line.

### *Total Cooling Tower Water Loss*

The total cooling tower water loss for each generating unit when operating is thus the estimated evaporation loss plus an allowance of 0.15 MGD for drift loss.

## **COOLING TOWER BLOWDOWN**

Cooling tower blowdown represents nearly all of the non-consumptive water use at the Susquehanna SES. Blowdown from each cooling tower is metered continuously. Cooling tower blowdown flow metering is accurate to within  $\pm 2.5$  percent. Cooling tower blowdown is discharged to the river downstream from the station.

## **EMERGENCY SPRAY POND MAKEUP**

The emergency spray pond has a surface area of approximately eight (8) acres. The estimated makeup flow to the emergency spray pond is 300 gpm, or approximately 0.43 MGD. Most of this flow is discharged from the pond to the cooling tower blowdown line downstream of the cooling tower blowdown meters. Emergency spray pond levels are monitored, and discharge can be monitored at an overflow weir. A small portion of the emergency spray pond makeup replaces evaporation from the pond.

## **SURFACE WATER WITHDRAWAL**

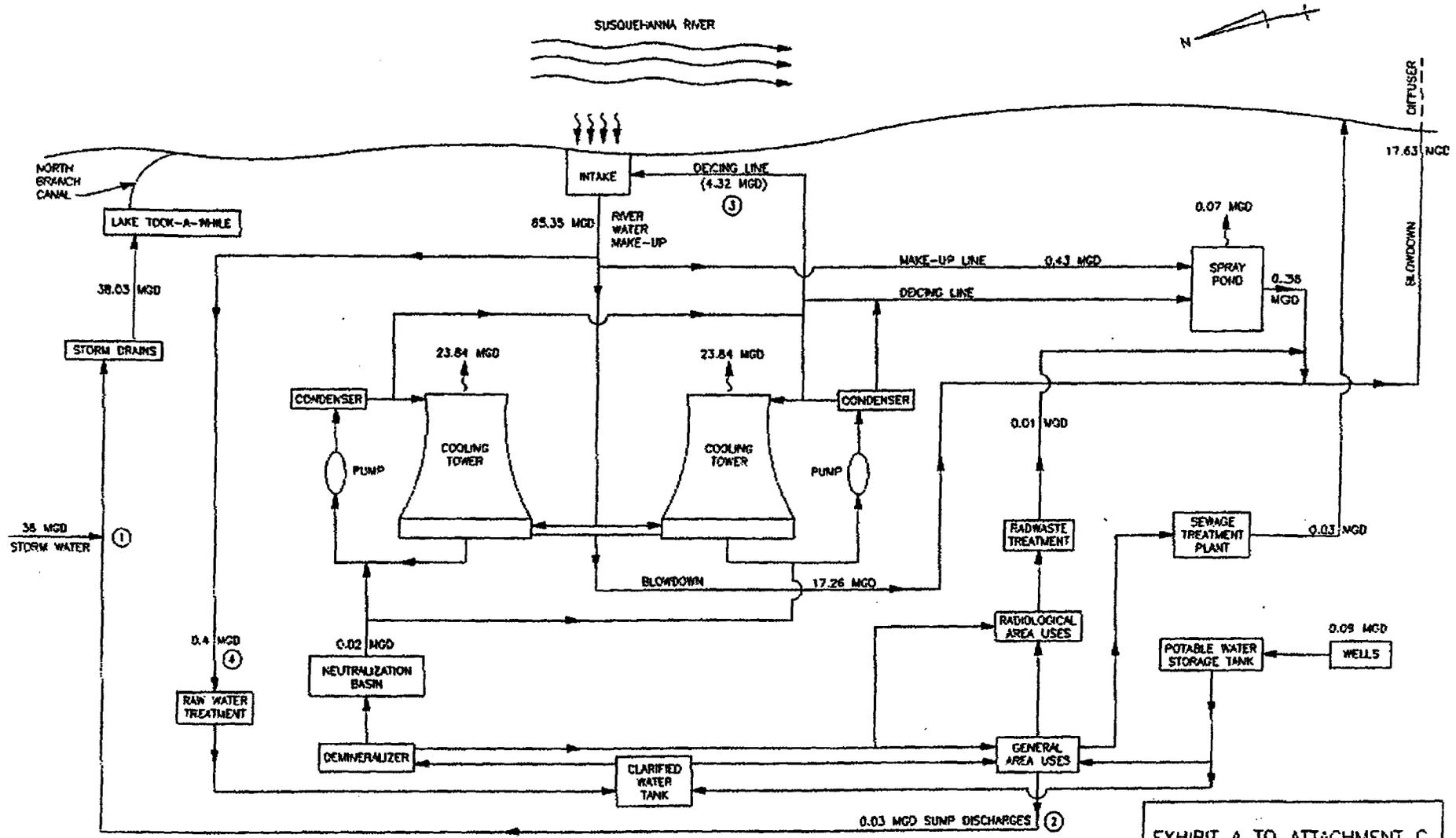
Each generating unit's total water usage is the sum of its cooling tower water loss (consumptive water use) and cooling tower blowdown (non-consumptive water use). The total station surface water withdrawal is estimated as the combined water usage of the two generating units plus an allowance of 0.4 MGD for the emergency spray pond makeup.

## **DATA**

Data monitored under this Plan are continuously entered in the Susquehanna SES Plant Integrated Computer System and readily integrated into daily averages. Final daily quantities of the data to be recorded and reported (below) are organized and/or derived by spreadsheet. The relationships depicted on the cooling tower performance diagram are programmed in spreadsheet format to facilitate estimating cooling tower evaporation from the relevant daily average data.

## **RECORD-KEEPING AND REPORTING**

PPL will keep daily records of (a) the cooling tower water loss for each generating unit, (b) the cooling tower blowdown for each generating unit, and (c) the total station surface water withdrawal, all estimated or measured as described herein, and will report the daily cooling tower water loss and the daily total station surface water withdrawal amounts, expressed in million gallons, to the Commission each quarter.



- ① STORM EVENT
- ② WHEN OUTSIDE SUMPS ARE DISCHARGED
- ③ DEICING LINE WATER IS RECIRCULATED BETWEEN THE RIVER INTAKE AND CIRCULATING WATER SYSTEM FROM MID-NOV. THROUGH MID-MARCH. IT IS NOT INCLUDED IN THE STATION'S WATER BALANCE.
- ④ APPROXIMATELY ONE MONTH PER YEAR AND IS NOT INCLUDED IN STATION'S WATER BALANCE.

EXHIBIT A TO ATTACHMENT C  
SSES WATER FLOW DIAGRAM  
POST-EPU MAXIMUM

**Exhibit 7**

**TIM HOLDEN**

17TH DISTRICT, PENNSYLVANIA

www.holden.house.gov

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CONGRESS OF THE UNITED STATES  
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**TRANSPORTATION  
AND INFRASTRUCTURE**  
HIGHWAYS, TRANSIT AND PIPELINES  
AVIATION

January 10, 2007

Mr. Eric J. Epstein  
4100 Hillsdale Road  
Harrisburg, PA 17112-1419

Dear Mr. Epstein *Eric*

Thank you for contacting my District Director Tim Smith regarding the status of your case with the Department of Homeland Security.

Accordingly, I am contacting the United States Department of Homeland Security to check the status of your case. When I have received any information from this agency, I will be in touch with you again.

In the meantime, should you have any questions or additional information to relay, please do not hesitate to contact my district office.

Sincerely,

**TIM HOLDEN**  
Member of Congress

TH/mv

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**TRANSPORTATION  
AND INFRASTRUCTURE**  
HIGHWAYS, TRANSIT AND PIPELINES  
AVIATION

December 28, 2006

Mr. Eric J. Epstein  
4100 Hillsdale Road  
Harrisburg, PA 17112-1419

Dear Mr. Epstein: *Eric*

Enclosed is a copy of the interim reply that I received from the United States Nuclear Regulatory Commission in response to my inquiry on your behalf.

Please be assured of my continued interest in your case, and I will be in touch with you again when I have received a final reply to your concerns.

As always, if you should have any questions or comments regarding this matter, please feel free to contact me.

Sincerely,

**TIM HOLDEN**  
Member of Congress

TH/mv

Enclosure

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(610) 916-6363



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 21, 2006

The Honorable Tim Holden  
Member, United States House of Representatives  
1721 North Front Street  
Suite 105  
Harrisburg, PA 17102

Dear Congressman Holden:

This is to acknowledge receipt of your letter dated December 7, 2006, regarding a petition filed by your constituent, Mr. Eric J. Epstein.

Please be assured that we are working on a response and a reply will be forwarded to you as soon as possible.

Sincerely,

A handwritten signature in black ink that reads "Rebecca L. Schmidt".

Rebecca L. Schmidt, Director  
Office of Congressional Affairs

## **Exhibit 8**



COMMONWEALTH OF PENNSYLVANIA  
OFFICE OF THE GOVERNOR  
HARRISBURG

THE GOVERNOR

July 12, 2004

TO THE HONORABLE, THE SENATE  
OF THE COMMONWEALTH OF PENNSYLVANIA

I am allowing Senate Bill 922 entitled "An Act amending Title 35 (Health and Safety) of the Pennsylvania Consolidated Statutes, providing for custodial care facilities" to become law without my signature. I realize that the House and Senate passed this bill with the best intentions of protecting children in the event an emergency. But, I am allowing it to become law without my signature as a demonstration of my concern for the limited scope of the bill.

The passage of this bill occurred in a very busy week where many weighty bills competed for the attention of leadership and members. In that context, the full debate worthy of this bill could not occur. As a result, the legislature passed a bill that requires only for-profit childcare facilities to provide emergency evacuation plans for the children in their care.

Nine months after I took office, I learned the state did not require emergency planning as a routine aspect of childcare licensure. Given these troubling times, when the potential for such emergencies is greatly increased, I directed the Secretary of Public Welfare to utilize her authority under 55 Pa. Code, §3270.21, §3280.20, and §3290.18 to publish a statement of policy in the December, 2003 Pennsylvania Bulletin requiring *every* child care center, group day care home and family day care home operator to develop an emergency preparedness plan. In concert with the Department of Public Welfare, PEMA created a standard emergency planning tool to guide *every* childcare provider in creating such a plan. This plan ensured that the provider had all possible phone numbers of parents and relatives of each child. It also required the provider to address how they might transport each child to safety in the case of an emergency. Obviously, these are questions that any substantive health and safety licensure process would require of any childcare entity.

Given that the legislation that was passed speaks to the need for emergency preparedness plans for only a segment of providers, and that it does not exempt the balance of such providers from preparing such plans, I believe our legal authority to require these plans is

maintained through regulation. No one should view this bill as an excuse for not following the Department's policy as outlined in December, 2003 Pennsylvania Bulletin.

The President and former Governor Ridge have urged us all to be vigilant. They call on each of us to be prepared in the case of an emergency. Yet this bill is silent with respect to emergency planning for the evacuation of children for 183,000 children in licensed non-profit or family care entities. This bill provides for the statutory authority to require a class of childcare providers to prepare emergency plans. I believe the law of the Commonwealth should require such plans for *all* classes of licensed providers.

I would urge the legislature to pass new legislation that ensures total consistency with this policy by expanding the statutory requirement for emergency plans to all childcare, group day care and family day care homes. I believe the parents in the Commonwealth who rely on these entities expect nothing less.

I am hopeful that you will see the wisdom of including *all* appropriate childcare facilities within the purview of the mandates of this bill and send legislation to me to correct this oversight this fall.



Edward G. Rendell  
Governor