

January 2, 2007

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

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

**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**

Dear Sir or Madam:

Please find enclosed for filing in the above stated matter Eric Joseph Epstein's Petition or Leave to Intervene, Request for Hearing, and Contentions in the above-captioned matter.

Thank you for your attention to this matter.

Respectfully submitted,

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

Enclosures
Exhibits

cc: See attached Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that on this second day of January, 2007, a copy of Eric Joseph Epstein's Petition for Leave to Intervene, Request for Hearing, and Contentions regarding the matter of the 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 Application was sent via electronic mail and by overnight delivery with tracking numbers to:

Office of the Secretary
U.S. Nuclear Regulatory Commission
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11555 Rockville Pike,
Rockville, Maryland 20852
Attn: Rulemaking and Adjudications Staff

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

Office of the General Counsel
US NRC
Washington, DC 20555-0001

David Lewis, Esquire
PPL c/o Pillsbury, Winthrop et al
2300 N. Street, NW
Washington, DC 20037

Department of Homeland Security,
Office of Inspector General
245 Murray Lane, SW,
Building 410,
Washington, DC 20528
Re: Control number 48407

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In the matter of
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

Date: January 2, 2007

I. Introduction.

Eric Joseph Epstein (“Mr. Epstein” or “Epstein”), pursuant to 10 C.F.R. § 2.309 (d) and (e), petitions 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 requests a hearing consistent with 10 C.F.R. § 2.309(a). Pursuant to 10 C.F.R. § 2.309(o), Epstein should be granted leave to intervene because he has standing; and, hereby submits five (5) admissible contentions.

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].

Comment Period for the Environmental Impact Statement for the License Renewal of Susquehanna Steam Electric Station, Units 1 and 2 Notice is hereby given that the U.S. Nuclear Regulatory Commission (NRC or the 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.

The purpose of this notice is to inform the public that the NRC has corrected the end of the comment period on the environmental scope of the SSES license renewal review from December 18, 2006, to January 2, 2007.

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]. (1)

¹ The entire text of Mr. Epstein's statement was published in the *Daily Update*, Commonwealth of Pennsylvania, Department of Environmental Protection in November, 2006: <http://www.depweb.state.pa.us/news/site/default.asp>, "Archived articles."

The entire transcript for the November 15, 2006 hearing in Berwick, Pennsylvania is available at the NRC's web site.

III. Timeliness

(b) Timing. Unless otherwise provided by the Commission, the request and/or petition and the list of contentions must be filed as follows:

(3) In proceedings for which a Federal Register notice of agency action is published (other than a proceeding covered by paragraphs (b)(1) or (b)(2) of this section)...

Eric Joseph Epstein's Petition for Leave to Intervene, Request for Hearing and Presentation of Contentions and Supporting Factual Data was submitted to all identified entities in a timely manner as identified by Federal Register postings of November 2, 2006 and December 21, 2006.

IV. Standing

(3) The Commission, the presiding officer, or the Atomic Safety and Licensing Board designated to rule on requests for hearing and/or petitions for leave to intervene will determine whether the petitioner has an interest affected by the proceeding considering the factors enumerated in § 2.309(d)(1)-(2), among other things.

e) Discretionary Intervention. The presiding officer may consider a request for discretionary intervention when at least one requester/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held. A requester/petitioner may request that his or her petition be granted as a matter of discretion in the event that the petitioner is determined to lack standing to intervene as a matter of right under paragraph (d)(1) of this section.

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 as an expert witness. 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.

This is a substantial departure from the old Subpart L, which required only the articulation of "areas of concern about the licensing activity that is the subject matter of the proceeding." The Commission believes that this modification better ensures that hearings will cover relevant concerns through the early framing of contested matters and the focusing of litigation on real, concrete issues. In addition, interested parties will now be required to file their contentions as part of the petition to intervene. Consequently, more "upfront" work will be required to prepare the petition to intervene, so the new rules provide additional time (60 days) to prepare the petition.

Mr. Epstein is a residential customer of PPL since 1983. Due to the construction, licensing, and operation of the Susquehanna Steam Electric Station, Mr. Epstein has experienced consistent and chronic rate shock (2) as a result of corporate decisions made by PP&L and its successor PPL.

² PP&L asked the Public Utility Commission (PUC) for \$315 million to recover the cost of building Unit-1. The PUC granted \$203 million on August 22, 1983, a 16% increase to the customer. The company asked for \$330 million for Unit-2 but was allowed \$121 million in April, 1985; an 8% increase to rate payers. As a result of the negotiated settlement approved by the PUC in August, 1998, PPL is recovering \$2.97 billion in stranded costs of which the majority are "uneconomic costs" associated with the construction of the Susquehanna Steam Electric Station.

Complete texts of the evidentiary hearings, testimony, and PUC's decisions are available at the PA PUC, Office of the Secretary, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

Mr. Epstein is a PPL shareholder in good standing since September 1987. Epstein is currently enrolled in the Dividend Reinvestment Plan, and his most recent accretion occurred on October 3, 2006.

Mr. Epstein has advocated for rate relief on behalf of Three Mile Island as a result of the construction and licensing of the Susquehanna Steam Electric Station for over 20 years. 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 (3). 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. (4)

Epstein is a Signatory to the JOINT PETITION FOR FULL SETTLEMENT OF PP&L's INC's RESTRUCTURING PLAN AND RELATED COURT PROCEEDINGS (August 12, 1998) (Docket No. R-00973954). (5)

³ PENNSYLVANIA PUBLIC UTILITY 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.

OPINION AND ORDER "... 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."

⁴ As such, Mr. Epstein reserves the right to prepare and submit expert testimony in the Present proceeding. Vitae of Eric Joseph Epstein available upon request.

⁵ Portions of PPL's relicensing proposal must necessarily be postponed and **resubmitted after** 2010 in order to preserve portions of Pennsylvania Public Utility Commission's 1998 Negotiated Settlement contained in Section III. Terms: A through M and Q. Complete Agreement; No Alterations or Modifications, and Section IV. Public Interest Considerations (See Contentions 1 and 4 for discussion.)

Eric Joseph Epstein was actively involved in the PP&L, Inc.,’s Request For Permission To Defer, For Future Recovery, A Portion of Its Transition Charges, or In The Alternative, To Exceed the Rate Caps Pursuant to 66 Pa. C.S. § 2804(4)iii(G); Docket No: P-00991780.

Mr. Epstein was an Active Party in the Petition of PPL, Inc. Petition asking for Issuance of Determination Under Section 329(c) of PUCHA, 15 USC Section 79z-5a9(c); Docket No. P-00991787. (6)

Epstein has been an Active Party in PPL Electric Utilities Corporation 2002-2006 Competitive and Intangible Transition Charge Reconciliation Filings; Reconciliation Filings with the Pennsylvania Public Utility Commission. (7)

⁶ See discussion in Contention 1 relating the PPL corporate status as an “electric utility” and its ability to service debt led through rate payer tariffs.

⁷ 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 **expires** on December 31, 2009 and must be evaluated **prior** to a license renewal. PPL has saved enough money to account for nuclear decommission. See discussion in Contentions 1 & 4.

PPL will continue to supply electric service as Provider of Last Resort through at least 2010, and the impact of relicensing can not be adequately assessed until a POLR plan is formulated, approved, and implemented by the PA PUC. Specifically, “PPL Electric believes that, based on current forward market prices for generation in 2010, that its total POLR rate increase on January 1, 2010 should be much smaller than those cited above. The Company currently estimates that the increase will be on the order of 20% to 30%” (*Direct testimony of Douglas Krall on Behalf of PPL EU*, p. 8., Pa PUC, Docket No. P-00062227, September 15, 2006.)

Epstein was an Active Party and Witness in PPL Electric Utilities 2004 application with the Pennsylvania Public Utility Commission requesting an increase in base rates to increase annual jurisdictional base revenues for electric transmission and delivery (T&D) utility service. (8) Mr. Epstein is currently an Active Party in PA PUC Docket No: P00062227 Petition of PPL Electric Utilities Corporation for Approval of a Competitive Bridge Program which may result in a 20% to 30% generation rate increase according to PPL.

Eric Joseph Epstein has clearly defined economic interests at stake in the license extension of the Susquehanna Steam Electric Station. Epstein, on behalf of TMI-Alert, has an established 20 year history of monitoring the nuclear power plant and advocating on behalf of PPL's 1.3 million residential rate payers.

The 1996 Electricity Generation Customer Choice and Competition Act gave Pennsylvanians the option to choose an "electric generation supplier" or EGS and PP&L became PPL. 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 (9), 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. (10)

8 In December 2004, the PUC approved an increase in PPL Electric's distribution rates of approximately \$137 million (based on a return on equity of 10.7%), and approved PPL Electric's proposed mechanism for collecting an additional \$57 million in transmission-related charges, for a total annual increase of approximately \$194 million, effective January 1, 2005.

9 Joint Application of PECO Energy Company and Public Service Electric & Gas Company for Approval of the Merger of Public Service Enterprise Group Inc. with and into Exelon Corporation, Docket No. A-110550F0160, July, 2005.

10 PPL is also subject to Regulatory Requirements and Tariff Provisions in each of the competitive wholesale and retail markets and jurisdictions in which they operate include: Federal Energy Regulatory Commission Standards of Conduct (18 CFR Part 358); and, Applicable Pennsylvania Standards: (a) Pennsylvania Statute Annotated - Electricity Generation Customer Choice and Competition Act - (66 Pa. C.S.A. §2801 et. seq.); (b) Pennsylvania Public Utility Code - Competitive Safeguards (52 Pa. Code §54.122).

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

Three Mile Island Alert Inc. has numerous 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 is a safe-energy organization based in Harrisburg, Pennsylvania and founded in 1977. TMIA monitors Peach Bottom, Susquehanna, and Three Mile Island nuclear generating stations. TMIA is the largest and oldest safe-energy group in central Pennsylvania.

TMIA also serves as regional clearinghouse on a broad spectrum of issues relating to nuclear power production including problems at Peach Bottom-2 and -3, Susquehanna-1 and -2 and the proposed siting, licensing and construction of a low-level radioactive waste dump in Pennsylvania.

TMIA has enjoyed widespread public and political support in its role as a watchdog of nuclear power production. In the spring of 1987, TMIA was recognized by the Pennsylvania House of Representatives for 10 years of community service. The House, along with the City of Harrisburg, formally applauded TMIA's efforts on behalf of the community at their 20th and 25th anniversaries.

TMIA's policy is generated by a seven member planning council which meets quarterly. TMIA meets regularly with the NRC and Pennsylvania Department of Environmental Protection to discuss issues and problems relating to TMI-1 and -2. The organization has two part-time volunteers who staff the office. In addition, several individuals write, edit, and mail TMIA's newsletter which is issued five to six times a year. All of TMIA's funding comes from membership dues, private contributions, and fund raising events.

Mr. Epstein is the Chairman of TMI-Alert. He has served as either Spokesperson or Chairman of the organization for 23 consecutive years.

Three Mile Island Alert membership has suffered through the 1979 meltdown at Three Mile Island Unit-2 and the forced shutdown of Peach Bottom Units 2 & 3 in 1987. 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 have legitimate and historic concerns regarding radiological contamination resulting from radiological releases (11) related to normal (12) 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. (13)

11 The releases include effluent discharges. In 1980, The Susquehanna Valley Alliance, based in Lancaster, successfully prevented GPU/Met Ed from dumping 700,000 gallons of radioactive water into the Susquehanna River.

12 On December 31, 1992, two PP&L consultants charged that SSES's highly radioactive spent fuel pools were unsafe and that if emergency cooling systems failed, a meltdown of spent fuel elements could occur. They told the NRC they reported their concerns to PP&L in March, 1992, and the company dismissed the matter and then tried to fire the engineers. On October 1, 1993, during an NRC presentation, the engineers, David Lochbaum and Donald Prevatte postulated that failure in spent fuel pool cooling could possibly lead to safety-related equipment failure and a full core meltdown.

13 On March 30, 1979, Governor Richard Thornburgh recommended an evacuation for preschool children and pregnant women living within five miles of the plant. Out of a target population of 5,000, over 140,000 Pennsylvanians fled their homes and businesses, including residents from Columbia and Luzerne counties.

Certainly, any evacuation on the scale of the TMI precautionary evacuation of March 30, 1979 would severely disrupt and damage Three Mile Island Alert's ability to conduct operations and violate the Pennsylvania constitution (14). *Id.* TMI-Alert therefore qualifies for intervention pursuant to 10 C.F.R. § 2.309 (d).

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.*" (15)

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 his membership are undisputed.

14 Article I, **Natural Resources and the Public Estate Section 27.**

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

15 PA PUC Commission, Public Meeting held July 14, 2005 Commissioners Present: Wendell F. Holland, Chairman; James H. Cawley, Vice Chairman Bill Shane; Kim Pizzigrilli; and, Terrance J. Fitzpatrick. "A-110550F0160 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.

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. (16), 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).

C. Eric Joseph Epstein has Representational Standing as Chairman of Three Mile Island Alert

TMIA's history and mission (as stated under B. Eric Joseph Epstein Has Standing on Behalf of Three Mile Island Alert, Inc.,) 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 subject to radiological contamination, evacuation, loss of property, or other harms in the event of any mishap at the plant. *Id.* Members also use, recreate, fish and enjoy the segment of the Susquehanna River adjacent and below the Susquehanna Steam Electric Station. 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).

16 §801.6 Water supply

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

(c) The Commission shall study the basin's water supply needs, the potential surface and ground water resources, and the interrelationships to meet these needs through existing and new facilities and projects. Efficient use and management of existing facilities with emphasis on the full utilization of known technology will be explored in meeting water supply needs for domestic, municipal, agricultural, and industrial water supply before new programs or projects are approved.

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. And 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).

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 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. (17)

17 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.

PPL Susquehanna staff told NRC Jan. 19 that **circumstances beyond their control** are prompting them to seek an exemption that would enable the plant to load spent fuel into a Nuhoms 61BT storage system before NRC has seen an amendment request from Transnuclear Inc. (TN) on the fuel involved. The Company filed for relief on January 31, 2006... PPL officials said they expect to submit a request by Feb. 2. (*PPL Seeks Exemption For Unapproved Spent Fuel Systems and Proposes Alternative Solution Nuclear Fuel*, Volume 31 / Number 3/January 30, 2006 C Adams number: ML060390150) . **(Boldface typed added.)**

D. Eric Joseph Epstein Meets Prudential Standing Requirements.

In addition, 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.

Please refer to **Exhibit 1** for a full discussion of TMI-Alert's opposition to PPL's request based on precedent, process and poor planning. (Teleconference with the NRC, "Re: Proposed Spent Fuel Exemption for the Susquehanna Nuclear Generating Station, March 14, 2006.)

V. Eric Joseph Epstein Submits Five (5) Admissible Contentions

A. Legal Standards

Proposed contentions must satisfy six requirements of 10 C.F.R. § 2.309(f)(1). This rule is intended to ensure that "full adjudicatory hearings are triggered only by those able to proffer at least some *minimal factual and legal foundation* in support of their contentions." *Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3)*, 49 N.R.C. 328, 334 (1999)(emphasis added). Sections (1) through (6) below summarize the requirements of Section 2.306(f)(1).

Contentions. (1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised...

(2) Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report...

(i) Provide a specific statement of the issue of law or fact to be raised or controverted;

(ii) Provide a brief explanation of the basis for the contention;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

B. Contentions

Contention 1:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted.

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.

(ii) Provide a brief explanation of the basis for the contention.

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.

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding.

The applicant raised the aforementioned financial issues throughout the license application but offered only cursory and superficial data, and omitted damaging material as a means of satisfying the license extension. Specifically, this contention addresses technical, environmental, safety concerns and socioeconomic raised in Application and Appendix E: Environmental Report and 5.0-5.1.1 and 6.1, and SAMA: E.3.2 Population, E.3.3 Economy, 3.4 EMPLOYMENT Current Workforce, and E.4.5 Replacement Power Cost, and Susquehanna MACCS2 Economic Parameters Variable Description SSES Value, et al.

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

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.

The facts presented will 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.

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

In 1996 the Electricity Generation Customer Choice and Competition Act, gave Pennsylvanians the option to choose an "electric generation supplier" or EGS and PP&L became PPL. The Company recently acknowledged in its 10-K Report that its primary business is generation. That admission undermines the NRC definition of what constitutes an “electric utility,” since PPL’s generational assets have been removed from the Pennsylvania rate base.

PPL is an energy and utility holding company with headquarters in Allentown...Through its subsidiaries, PPL is primarily engaged in the generation and marketing of electricity in two key markets - the northeastern and western U.S. - and in the delivery of electricity in Pennsylvania, the U.K. and Latin America. PPL's overall strategy is to achieve disciplined growth in energy supply margins while limiting volatility in both cash flows and earnings and to achieve stable, long-term growth in regulated delivery businesses through efficient operations and strong customer and regulatory relations. More specifically, PPL's strategy for its electricity generation and marketing business is to match energy supply with load, or customer demand, under contracts of varying lengths with creditworthy counterparties to capture profits while effectively managing exposure to movements in energy and fuel prices and counterparty credit risk. (18)

By its own definition, PPL is a aggressive business operating in the volatile energy market, and the absence a bridge tariff will create “material damage” to the Company. “If such a mechanism is not approved, the Company will suffer financial harm to the extent that is unable to recover from customers the full costs of acquiring generating supply on their behalf. The Company is unable to quantify, until contracts are in place, what that harm may be.” (19)

Moreover, there is a great deal of uncertainty regarding whether a portion of PP&L’s nuclear decommissioning costs have to be recovered through market rates after the CTC expires on December 31, 2009.

18 Form 10-K for PPL CORP 3-Mar-2006 Annual Report.

19 PA PUC, D.A. Krall a Response to Eric Joseph Epstein Interrogatories Set I Question 14, October 25, 2006, Docket No. P-00062227.

PPL's own witness has testified in other proceedings:

Therefore, it will be possible that, following the transition to competition, the NRC will determine that the Company's nuclear decommissioning costs are not recovered through rates established by the PUC. This determination could cause the NRC to reconsider PP&L's status as an 'electric utility' exempt from decommissioning financial assurance requirements. If PP&L were to lose its status as an 'electric utility', it might have to pre-fund the entire cost of decommissioning Susquehanna or, at a minimum, provide some form of insurance or other surety for future decommissioning trust fund collections. Either portion would have a significant financial impact on PP&L and would increase the level of its stranded costs. (20)

The definition of PPL as an electric utility has become elastic:

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 NRC's regulations address the changing landscape caused by deregulation. In fact, the NRC specifically addresses the situation of nuclear utilities under the jurisdiction of regulatory authorities.

...The Commission notes that the key component of the revised definition is a licensee's rates being established either through cost-of-service mechanism or through other non-bypassable charge mechanisms, such as wire charges, non-bypassable customer fees, including securitization or exit fees, by a rate-regulating authority ...Should a licensee be under the jurisdiction of a rate-regulating authority for only a portion of the licensee's cost of operation, covering only a corresponding portion of the decommissioning costs that are recoverable by rates set by a rate-regulating authority, the licensee will be considered an "electric utility" only for part of the Commission's regulations to which those portions of costs pertain. (Pages 47593-47594)

20 Pa PUC, PP&L Base Rate Case, Direct Testimony of Company Witness, Statement 3, Joseph M. Kleha, pp. 13-14, 1997. PP&L recommitted to this position on May 22, 1997 in Response to Interrogatories to the Office of Small Business Advocate, Set I, Q. & A. 9.

Clearly, the NRC has anticipated the nuclear industry's financial apprehension and promulgated regulations to resolve the industry's concerns. The problem in the present case is the fact that the NRC has not addressed (and the Company has not provided data) that indicate **a mere definition constitutes financial assurance**; if in fact, PPL is still an "electric utility" under NRC guidelines.

Mr. Epstein has been actively involved with issues pertaining to nuclear decommissioning and radioactive waste management dating back to the Pennsylvania Power and Lights (PP&L) Base Rate Request before the Public Utility Commission (PUC) in 1995. Mr. Epstein does not dispute the Company's contention as evidenced in the 1995 Base Rate Proceedings that radiological decommissioning and radioactive waste isolation expenses are **subject to change and likely to increase**. At issue is the indisputable fact that PPL's rate funding mechanism for **nuclear decommissioning is underfunded** and the **Company does not possess the ability to make up the shortfall through rate increases** on hostage customers.

Please refer to **Exhibit 2** for a detailed study on PPL's underfunding, "Backed Into A Corner: Cleaning Up Pennsylvania's Nuclear Power Plant," October 23, 2003.

Recently, Mr. Epstein pointedly asked the Company: "Does PPL believe that "poor planning that leads to 'imprudent' investments should be subsidized by rate payers?" PPL's response, "The Company does not believe that rate payers should subsidize imprudent investments." (21)

²¹ Pa PUC, T.R. Dahl and J.M. Kleha Response to Eric Joseph Epstein Interrogatories Set II Question 3, November 20, 2006, Docket No. P-00062227).

The Company willfully pursued a financial investment in nuclear energy which was knowingly fraught with huge uncertainties. (22) The NRC sanctioned the initial gambit with the comfort of knowing that financial shortfalls could be made up through rate tariffs. Rate payers no longer provide a financial security blanket for PPL or the NRC for PPL's risky nuclear investment strategy. Mr. Epstein argues that the current rate structure and corporate accountability require that a substantial difference between the nuclear funding target and the actual costs relating to nuclear decommissioning and nuclear waste disposal (23) will be borne by the entities that are traditionally held responsible for imprudent and unreasonable management decisions -- the electric industry shareholder.

All objective data indicate that the **fund is grossly underfunded** with **no possibility for rate relief**. Since the plant is out of the rate base, extending the operating life by 20 years actually increases the short fall by creating more waste tonnage (1,200 metric additional tons) that will need to be removed and remediated.

22 "One dark cloud was on the horizon when PP&L got construction under way. By late 1974, when construction crews had been on site for nearly a year, overall cost of the Susquehanna project was estimated at \$1.385 billion. That was nearly three times the estimated cost when Jack Busby had announced the project back in 1970. Between 1974 and 1984, PP&L construction expenditures for generating capacity topped \$4.3 billion. Much of that was attributable to nuclear construction." PP&L, 75 Years of Powering the Future: An Illustrated History of Pennsylvania Power & Light Company, Published by Pennsylvania Power & Light Company. Bill Beck, Eden Prairie, Minnesota, Viking Press, 1995, p. 384.)

23 Q. 12. "What technological initiatives are PP&L pursuing to ensure decommissioning technology is available when the SSES is no longer operational?"

A. 12. "PP&L expects that appropriate decommissioning technology will be available at the time Susquehanna is decommissioned, and accordingly, is not pursuing additional 'technological initiatives' at this time." (Company's Response to Interrogatories of Eric Joseph Epstein, Set I, Dated June 3, 1997.)

(vii) Remedies

a) The NRC's Atomic Safety and Licensing Board must compel, PPL Susquehanna LLC, the majority owner and operator of the Susquehanna Electric Station, to conduct a comprehensive financial due diligence to ascertain the ability of the nascent and emerging limited liability corporation to service its nuclear obligations under deregulation. PPL is the corporate progeny of the original holding company, i.e., PP&L, that applied for, and obtained a license to operate the SSES.

b) The NRC's Atomic Safety and Licensing Board must 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.

c) The NRC's Atomic Safety and Licensing Board must compel PPL to provide an action plan to address how the Company will finance nuclear debt load, particularly the cost of decommissioning, after PPL is removed from the generation rate base on December 31, 2009.

(viii) Conclusion

PPL will continue to supply electric service as Provider of Last Resort (POLR) through at least 2010, and the impact of relicensing can not be adequately assessed until a POLR plan is formulated, approved and implemented by the PA PUC. PPL recognizes the economic dislocation its rate increase will cause is "substantial" and is attempting to minimize the damage to its customers through a Complete Bridge Plan (CBP).

The Company believes that implementation of the CBP will help to reduce the likelihood of so-called "rate shock" when its generation rate cap ends on January 1, 2010. I would like to provide some background on this issue...PPL Electric believes that, based on current forward market prices for generation in 2010, that its total POLR rate increase on January 1, 2010 should be much smaller than those cited above.

The Company currently estimates that the **increase will be on the order of 20% to 30%**. This amount is still substantial, however, and could be higher or lower based on actual market prices over the next several years. PPL Electric, therefore, believes that it is prudent to take action now to begin to obtain POLR supply for 2010, which may help to moderate POLR rate increases on January 1, 2010 by spreading the acquisition of POLR supply over a period of several years and, thereby reduce the risk from a short-term price spike. (24)

(Boldface type added)

License renewal must necessarily await the outcome of the Competitive Bridge Plan litigation (2007), subsequent POLR rate and tariff adjustments (2010-2011), and a fiscal due diligence of PPL to determine to if the Company has the resources and regulatory recourse to secure, obviate, and satisfy its debt burden, financial obligations, and maintain sufficient decommissioning trust funding levels.

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. The NRC must compel PPL, a newly formed corporate applicant, to prove they possess the requisite financial wherewithal to service nuclear obligations without penalizing the host communities surrounding the SSES.

24 *Direct Testimony of Douglas A. Krall on behalf PPL Electric Utilities Corporation*, pp. 6-8, Pa PUBLIC UTILITY COMMISSION, Docket No. P-00062227, September 15, 2006.)

Contention 2:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted.

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

(ii) Provide a brief explanation of the basis for the contention.

The Susquehanna River Basin Commission and the Pennsylvania Department of Environmental Protection (PA DEP) are in the process of collecting, evaluating, and implementing a comprehensive water use plan for Pennsylvania, i.e., Act 220. 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.

In addition, a number of infestations, specifically Asiatic clams and Zebra mussels, have required power plants to prepare plans to defeat these aquatic invasions.

iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding.

The applicant raised and attempted to address water quality, water use, aquatic communities, groundwater use, entrainment and impingement, and impact microbiologic organisms throughout the license application, but offered only cursory and superficial data, and failed to address numerous issues that could adversely impact the license extension request. Specifically, this contention addresses technical, environmental and safety concerns raised in Application and Appendix E: Environmental Report 2.2.21-2.5, 2.91, 2.9.2, 4.0 to 4.8.1, 4.12, 4.15.1, 5.0-5.1.1 and 6.1, and SAMA: 4.15 PUBLIC UTILITIES: PUBLIC WATER SUPPLY AVAILABILITY and 5. 16 Flood, et al.

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

Nuclear power plants require large amounts of water for cooling purposes. PPL's Susquehanna Electric Steam Station power plant will remove water from the Susquehanna River, and it is likely fish and aquatic life will be harmed. Animals and people who depend on these aquatic resources will also be affected. PPL's planned uprate and application for relicensing will further place pressure on limited water resources. Freshwater water withdrawals by Americans increased by 8% from 1995-2000, and Americans per capita water withdrawal is three times above the international average. (25)

Question 1: How can the NRC approve the license renewal for of the SSES prior to the adoption and implementation of the the Water Resources and Planning Plan plan under Act 220?

Question 2: How many fish (game and consumable), fish eggs, shellfish and other organisms will be harmed or killed annually by the license renewal?

25 "U.S. National Report on Population and the Environment" (2006) published by the Center for Environment and Population, a nonprofit corporation based in Connecticut.

Millions of fish (game and consumable), fish eggs, shellfish and other organisms are sucked out of the Susquehanna River and killed by nuclear power plants annually. Now large water consumers, including PPL, are compelled to inventory mortality rates and identify species of aquatic life affected by water intakes. Older power plants like Brunner Island and the Peach Bottom Atomic Power Station have the option of implementing fish-protection measures such as screens with fish return systems or traveling screens with backwash devices.

It is hard to know just what the impact on fisheries is, because cool water intakes have been under the radar screen compared to some types of pollution, said Pennsylvania Fish and Boat Commission aquatics resources chief Leroy Young. But any time you have a man-induced impact on top of what nature is doing, you're affecting the ecosystem, Young said. (26)

A former Peach Bottom nuclear plant employee said he was "sickened" by the large numbers of sport fish he saw sucked out of the Susquehanna. "When the water comes in, fish would swim in through tunnels and swim into wire basket. There were hundreds and hundreds of fish killed each day. Stripers and bass and walleye and gizzard shad and all kinds of fish. It took a forklift to carry them out" (*Intelligencer Journal*, January 15, 2005).

In December, 2005 the the Department of Environmental Protection (DEP) issued a notice of violation to PPL for a fish kill that occurred due to a sharp increase in the temperature of the water discharged into the Susquehanna River from Brunner Island. Hundreds of fish from minnows to bass to shad were killed.

According to DEP South central Regional Director Rachel Diamond,

PPL took a circulation pump off line and that resulted in a rapid and dramatic rise of about 20 degrees in the temperature of the water flowing to the river from the company's discharge channel, PPL exceeded the thermal limits in their discharge permit and violated sections of Pennsylvania's Clean Streams Law.

26 Ad Crable, *Intelligencer Journal*, January 15, 2005.

Question 3: Has the Commission established “acceptable levels” of fish kills? If so, where can that data be found?

Question 4: What impact will the uprate (27) and license extension of the plant have on shad ladders?

Question 5: What quantifiable impact will renewal have on sport and commercial fishing?

On July 9, 2004, the Environmental Protection Agency (EPA) issued the Final Phase II rule implementing Section 316 (b) of the Clean Water Act:

The first national standards for reducing fish kills at existing plants.

“The rule established requirements for reducing adverse environmental impacts from the entrainment and impingement of aquatic organisms living near power plants.” (28)

Question 6: What will the Commission’s compliance reporting requirements be in regard to onsite 316 (a) and 316 (b) monitoring? Where will the results be published?

Question 7: What will the Commission’s compliance reporting requirements be in regard to onsite and offsite tritium monitoring? How will the Commission account for offsite masking as a result of landfill tritium leachate? Where will the results be published? (28)

26 A General Electric Co. subsidiary said Sept. 22 that it won a \$10 million contract to increase the electric generating capacity of PPL Corp.’s two-unit Susquehanna nuclear plant by about 200 MW combined. This is part of an extended power uprate for the boiling water reactor units at the nuclear plant, near Berwick (Generation Markets’ Week, September 27, 2005).

“PPL Susquehanna has filed a request with the US NRC to increase the amount of electricity its nuclear power plant can generate” (PPL Press Release, October 17, 2006.)

27 *Exelon Annual Report*, Financial Information, Annual Report, p. 187.

28 *Re: Disposal and licensing of tritium exit signs*, Letter from Thomas J. Fiddler, Pa DEP, Deputy Secretary to Nils. J. Diaz, Chairman, US NRC, January 17, 2006.

Nuclear plants use millions of gallons daily for coolant and to perform normal industrial applications. There are five nuclear generation units on the Susquehanna River. Two plants, with three units, are located on the Lower Susquehanna, and have the capacity to draw in as much as half the flow of a River in a day. Susquehanna's uprate and relicensing requests will increase the pressure on the River's resources. According to the Environmental Protection Agency (EPA), nuclear power remains a water intensive source of producing electricity:

Water Consumption: Fossil Power Plants

| Technology | gallons/kWh | liters/kWh |
|--------------------|--------------------|-------------------|
| Nuclear | 0.62 | 2.30 |
| Coal | 0.49 | 1.90 |
| Oil | 0.43 | 1.60 |
| Combined Cycle Gas | 0.25 | 0.95 |

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.

Question 8: How much water will be drawn form the Susquehanna River on a daily basis after the uprate and relicensing of the SSES?

Question 9: How much water will be returned on a daily basis?

Question 10: Will the water be treated with chemicals? (30)

30 In February 1986, one celled organisms believed to be fungus, bacteria and algae like creatures were discovered at Three Mile Island. These creatures obscured the view of the reactor core, and impeded the cleanup.

Question 11: How does PPL plan to defeat Asiatic clam and/or Zebra mussel infestations? (31)

When it comes to water consumption, fish kills, thermal inversion and effluent discharges, nuclear power plants are sometimes viewed as a benign monster.

A sample of the magnitude of the amount of water used at nuclear power plants is readily evidenced at PPL's Susquehanna Steam Electric Station (SSES) located on the Susquehanna River in Luzerne County. The plant draws 0.86 million gallons per day from the Susquehanna River. For each unit, 14.93 million gallons per day are lost as vapor out of the cooling tower stack while 11 million gallons per day are returned to the River as cooling tower basin blow down. On average, 29.86 million gallons per day are taken from the Susquehanna River and not returned. This data is public information, and can be easily referenced by reviewing PPL's Pennsylvania Environmental Permit Report.

31 DEP recently confirmed that zebra mussel adults and juveniles have been found in Goodyear Lake, the first major impoundment on the Susquehanna River's main stem below Canadarago Lake in New York. Zebra mussels are an invasive species posing a serious ecological and economic threat to the water resources and water users downstream in the river and Chesapeake Bay...In 2002, the first report of zebra mussel populations in the Chesapeake Bay Watershed were reported from Eaton Reservoir in the headwaters of the Chenango River, a major tributary to the Susquehanna River in New York. A short time later, zebra mussels also were found in Canadarago Lake, a lake further east in the Susquehanna main stem headwaters. Now, through DEP's Zebra Mussel Monitoring Network, reports were received that both zebra mussel adults and juveniles, called veligers, have made their way down to the Susquehanna main stem, (Pa DEP, Update, July 16, 2004.)

For more information on zebra mussels, visit DEP's Web site at www.dep.state.pa.us, Keyword: "DEP Water Quality."

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. (32) **The SSES did not take any measures or precautions to “conserve” water.**

Question 12: What actions will PPL take to curb water consumption during periods of conservation and/or drought?

(vii) Remedies

PPL’s request is incomplete and premature.

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,” (33) 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.

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

(viii) Conclusion

The Susquehanna Steam Electric Station is a menacing predator on the Susquehanna River, and a large industrial consumer of a valuable and limited commodity. Any comprehensive and substantive water management plan must include the impact of relicensing and uprates planned for the SSES.

32 Pennsylvania Department of Environmental Protection, *Drought Report and Drought Conditions Summary*, August-September, 2002).

33 PPL Press release, October 17, 2006.

Contention 3:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted.

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

(ii) Provide a brief explanation of the basis for the contention.

Pennsylvania is the second oldest state in the nation after Florida and its fastest growing population segment is octogenarians. (34) An aging population base has unique and sensitized needs that were not factored, considered, or analyzed in the licensee's application. Moreover, PPL's intent to raise electric prices by at least 20% to 30% in the near future hits fixed-income and aging population bases especially hard.

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding.

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. Specifically, this contention addresses socioeconomic, environmental and safety concerns raised in Application and Appendix E: Environmental Report 2.6-2.7, 2.8, 2.9, 2.9.1-2.9.3, 3.4.1, 4.13-4.14, 4.18, 4.19, 5.0-5.1.1 and 6.1, and SAMA: E.3.2 Population, E.3.3 Economy, 3.4 EMPLOYMENT Current Workforce, and E.4.5 Replacement Power Cost, and Susquehanna MACCS2 Economic Parameters Variable Description SSES Value, et al.

³⁴ According to the Census Bureau (2000), the average number of residents living in a U.S. county who are 65 or older is 15.3%.

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding.

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.

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

PPL has been steadily reducing its workforce through attrition, “out sourcing” and early retirements while the surrounding population base is growing older. (35)

Since the Company has no “official policy” on “out sourcing”, it is unable to quantify positions that have been eliminated do to the practice: “PPL Electric does not have a formal policy on outsoucing...PPL Electric has no record of how many internal Company positions may have been eliminated as a result of out sourcing.” (36)

³⁵ PA PUC, T&D Rate Request, J.R. Schadt, PPL Response to OCA, Set XII, Q.2.

³⁶ PA PUC, T&D Rate Request, D.A. Krall, PPL Response to Epstein, Set II, Q.7, May 17, 2004.

However, external workers are increasingly supplementing an understaffed and aging workforce. J.R. Schadt testified:

The increase in work by outsiders is primarily a function of utilizing additional outside contractors in lieu of PPL electric workforce. When PPL Electric planned its work for 2004, it compared its total man-hour needs to projected available PPL electric man-hours, any shortfall is made up with outside contractor labor. (37)

The amount of labor contracted to “work by others” is significant. In 2004, PPL’s reliance on “out sourcing” is projected to increase to \$53,362,932. Among the tasks "out sourced" include: service requests; power service problems; disconnects and reconnects; specific projects; maintenance; inspections; collections; waste removal; consultant support services; and, manual labor. (38) Moreover, PPL has requested that the rate payers finance this policy. From 2003 through 2004, PPL decreased the number of transmission and distribution of (T&D) “bargaining unit” employees from 1,856 to 1,747 while increasing the number of nonunion employees from 497 to 505. (39)

37 PA PUC, PPL TD Rate Request, J.R. Schadt, PPL Response Informal Data Requests, OCA, Q.6, June 10, 2004.

38 PA PUC, PPL TD Rate Request, J.R. Schadt, PPL Response to OCA, Set XII, Q.2, May 20, 2004.

39 PA PUC, PPL TD Rate Request, J.R. Schadt & D.A. Krall, Response to Epstein, Data Request, 1, June 14, 2004.

Of the 94 AMR positions “eliminated” 57 were “retirement eligible” union employees, 23 were “non-retirement eligible union members” and 14 were management (Letter from Royce S. Kosoff, FSA, Towers Perrin, to George Sunder, Team leader - Benefit Accounting, PPL, October 13, 2003.)

PPL has chosen to atrophy departments not affected by layoffs. “The current ratio of linesman to households, business to customers in general is .0006 employees in linesman type positions per customer.” (40) The Company noted that a rate increase is needed to help service a growing customer base, yet PPL has no plans to maintain or improve upon the existing ratio.

The Company presumes synergies garnered from efficiencies of scale will enhance compliance with reliability standards: “In an effort to improve operational efficiency and reduce costs, PPL and its subsidiaries commenced a workforce reduction assessment in June 2002 that was executed to eliminate up to 598 employees or about 7% of PPL’s U.S. workforce.” (39)

Yet efficiencies of scale through attrition at PPL have produced increased costs and have not been applied at the same ratio to upper-level management or the Board of Directors. Although PPL does not calculate its budget or prepare staffing levels on a per customer basis, it is clear that downsizing has actually increased pressures on PPL to seek lower costs through external contracted labor.

The multifaceted problems PPL faces moving forward, such as declining and aging labor pool and aging population base were omitted from PPL’s renewal application. Together, with a minimal rate increase of 20% to 30%, the SSES communities will continue to experience undue economic hardship. 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.

40 PA PUC, PPL TD Rate Request, D.A. Krall, PPL Response to Epstein, Set II, Q.8.

41 PPL, 2003 Annual Report, p. 94.

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%. (42)

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 level. (43)

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.” (44)

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

The latest population trending and its impact on resources can be found in the “U.S. National Report on Population and the Environment” (2006) published by the Center for Environment and Population.

43 PA PUC, Bridge to Competition, T.R. Dahl, PPL Response to Epstein, Set II, Q.8, October 25, 2006.

44 PA PUC, Bridge to Competition, D.A. Krall, PPL Response to Epstein, Set I, Q.10, October 25, 2006.

In fact Mr. Epstein's proposed remedy was rejected by the Company. Epstein asked if PPL supported "reduced residential tariffs for the following special needs communities: nursing homes; senior or non-ambulatory living communities; group homes for physically or mentally challenged juveniles and adults; and school districts adversely impacted by revenue neutral reconciliation tax assessments (RNR)."

PPL responded, "...Because PPL Electric proposes to recover POLR generation supply costs at a flat rate per kwh, it does not support any special rate relief or these types of customers for POLR charges." The PPL executives failed to directly address the Company's policy of property devaluations, and flatly stated: "PPL Electric is not aware of any effect upon RNR assessments that will result from solicitation of bids for POLR service. Therefore the Company does not support any special rate relief for such customers or communities in the context of these proceedings". (45)

(vii) Remedy.

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.

(viii) Conclusion.

The NRC can not ignore the facts on the ground, or PPL's responses made under oath at the PA PUC. 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 rates, it can find the time and resources to prepare an analysis to assess the impact of rate shock and property devaluations on the most vulnerable populations residing in its own backyard.

45 PA PUC, Bridge to Competition, T.R. Dahl and J.M. Kleha, PPL Response to Epstein, Set II, Q.2, November 7, 2006.

Contention 4:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted.

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.

(ii) Provide a brief explanation of the basis for the contention.

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.

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding.

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 raised in the Application and Appendix E: Environmental Report 2.62.1-2.6.2.2, 2.7-2.7.2, 2.9-2.9.3, 3.4.1, 4.13.1-4.14, 4.17-4.18 , 5.0- 5.1.1 and 6.1, and SAMA: E.3.2 Population, E.3.3 Economy, 3.4 EMPLOYMENT Current Workforce, and E.4.5 Replacement Power Cost, and Susquehanna MACCS2 Economic Parameters Variable Description SSES Value, et al.

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding.

Relicensing a nuclear power plant should not impose economic hardships on the host community. PPL has successfully sued local taxing authorities and defended the school system 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 incompatible with the NRC's mission.

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

The Public Utility Realty Tax Assessment (PURTA) was the tax sharing formula used prior to the deregulation of electric generating stations. PURTA was the tax plan when the Susquehanna Steam Electric Station was initially licensed. The system was predicated on a statewide distribution plan. The utilities claimed that after deregulation, local communities would increase their revenue streams, while allowing electric companies to decrease the amount of taxes they paid by focusing on local school districts and municipalities.

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.

After deregulation, the utilities claimed that their large power plants were assessed and taxed at a rate disproportionate to the value of their facilities. Nuclear plants were being sold at a fraction of their book value, e.g., Three Mile Island \$99 million (despite book value at \$512 million) and the Companies relied on these figures to calculate their tax base. Nuclear plants now sell for the same value as traditional fossil stations. In late, 2000 Indian Point-2 was sold for \$652 per megawatt of generating capacity, and Nine-Mile Point-2 sold for \$621 per megawatt of generating capacity. The value of nuclear generating stations was clearly established.

The “stranded costs” PPL is collecting, \$2.97 billion, through the CTC tariffs, are based on earlier miscalculations. PPL supposedly understood that in order for free-enterprise to thrive, they would have to abandon their rate recovery dependency. Suffice it to say, PPL got it both ways: stranded costs recovery and less taxes as a result of devalued power plants.

The plant was valued at \$800 million for 1998-1999. PP&L was paying \$38 million annually just for the SSES. The SSES had a \$100 million valuation for 2000 that was not escrowing. The 2001 valuation was approximately \$160 million while PPL increased its generating capacity. (46).

⁴⁶ On April 23, 2001, PPL announced it would petition the NRC to increase the capacity of SESS by 100 megawatts, while decreasing the property value of the plant. “The 120 million of improvements at the Susquehanna plant are expected to add to earnings as soon as they go into operation”

After PPL sued the local taxing bodies, the actual valuation in the SSES case turned out to be \$56 million for a plant that yielded an annual profit of \$20 million. By comparison, the valuation of the Columbia Hospital is approximately \$74 million. An income approach based approach on depreciated valuation needs to be applied to this plant in order to rectify the gross anomaly. The “old version” of PURTA had the plant assessed as much as \$3 billion. There are no replacement revenue streams for the Berwick Area School District, Salem Township, and Luzerne County.

For a case study of the negative impact that PPL and RNR has had on local communities, please refer to Exhibit 3: “PPL Refuses to Pay Its Taxes.”

(vii) Remedy.

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 SSES’s capacity and environmental impact increase, while the Company’s charitable contributions, social programing and revenue contributions steadily decline.

(viii.) Conclusion.

The Public Utility Realty Tax Assessment (PURTA) was the tax assessment formula used when the Susquehanna Steam Electric Station was initially licensed. The formula was predicated on a statewide distribution plan. The utilities influenced the legislature to "restructure" PURTA in the Deregulation Act (1998). The utilities claimed that local communities would increase their revenues, and allow utilities to decrease the amount of taxes paid by focusing on local school districts and municipalities. This did not happen, and has created a **material adverse conditions for local communities**.

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 and property tax rates, in part due to the extended operation of the Susquehanna Steam Electric Station.

Contention 5:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted.

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.

(ii) Provide a brief explanation of the basis for the contention.

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).

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding.

The Susquehanna Steam Electric Station has failed to include child care facilities in their Radiological Emergency Plans for the past 24 years. As such, all three facilities are 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 Emergency as a condition to own and operate a nuclear power license, and SAMA: E.3.2 Population, E.3.3 Economy, 3.4 EMPLOYMENT Current Workforce, E.3.5 Nuclide Release, E.3.6 Evacuation, E.4.5 Replacement Power Cost, and Susquehanna MACCS2 Economic Parameters Variable Description SSES Value, et al.

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding.

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.

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

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) (47), and the Commonwealth of Pennsylvania (48) of 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. (Please refer to Exhibit 4 for a “Chronology of the Legal History” relating to the inadequacy of emergency preparedness for special needs’ populations living within 10 miles of all Pennsylvania nuclear power plants.)

Mr. Epstein filed suit at the Department of Justice on August on 28, 2006. 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.

47 The Federal Emergency Management Agency (FEMA) is charged with the oversight of offsite emergency planning around nuclear plants. On March 1, 2003, the Federal Emergency Management Agency (FEMA) became part of the U.S. Department of Homeland Security (DHS). FEMA's continuing mission within the new department is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program.

48 State agencies with oversight responsibilities relating to emergency planning requirements for nursery schools and day-care centers in Pennsylvania include: the Department of Public Welfare, the Department of Education, the Department of Environmental Protection and the Pennsylvania Emergency Management. These agencies have been served all relevant documentation and have attended numerous meetings with the Petitioner. Representatives and legal counsel to the above mentioned agencies may rotate, but “institutional memory” as well as the doctrine of “constructive notice” ensures that these entities are fully cognizant with the issues raised in this document.

(vii) Remedy.

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. (49)

49 From: "Sysop" <Sysop@gao.gov>

Date: Mon, 20 Nov 2006 12:00:31 -0500

To: <ericepstein@comcast.net>

Subject: Questioning Emergency Evacuation Plan for Child Care Facilities, i.e. In responds to your correspondence submitted to the GAO FraudNet questioning why child care facilities, nursery schools and daycare centers around nuclear plants are not currently required to be apart of any radiological incident or evacuation plan. We have assigned control number 48407 to this matter and request that it be used in any future correspondence with this office.

We reviewed your information and found that the situation you describe is not within the scope of any GAO work. Therefore, in accordance with GAO FraudNet policy to forward instances of suspected wrongdoing to executive agencies for appropriate action, we referred your concerns to the Department of Homeland Security, Office of the Inspector General (DHS/OIG), for their review and whatever action they deem appropriate.

If you have additional information you may provide it to the DHS/OIG at 1-800-323-8603 or write to the following address: DHS/OIG, 245 Murray Lane, SW, Building 410, Washington, DC 20528.

GAO is responsible for assisting Congress in carrying out its oversight responsibilities pertaining to government programs, activities and functions. Generally, this involves examining the programs and operations of federal departments and agencies, rather than reviewing singular allegations of wrongdoing or poor performance in connection with specific matters.

Thanks you for your interest.

(viii) Conclusion.

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 24 years.**

It is physically impossible for federal, state, or local government to verify that any of Pennsylvania's special needs' populations (49) can subscribe to NUREG-0654 J-12 Reception Centers since these facilities have not been assigned a relocation center. 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:"

h. Relocation centers in host areas which are at least 5 miles, and preferably 10 miles, beyond the boundaries of the plume exposure emergency planning zone (see J.12.);

12. The offsite response organization shall describe the means for registering and monitoring of evacuees at relocation centers in host areas. The personnel and equipment available shall be capable of monitoring within about a 12-hour period all residents and transients in the plume exposure EPZ arriving at relocation centers.

⁴⁸ Also included in these "special populations" are nursing homes, group homes for the mentally impaired, and correctional facilities.

VI. Conclusion

§ 2.309 Hearing requests, petitions to intervene, requirements for standing, and contentions.

(a) General requirements. Any person whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or petition for leave to intervene and a specification of the contentions which the person seeks to have litigated in the hearing. Except as provided in paragraph (e) of this section, the Commission, presiding officer or the Atomic Safety and Licensing Board designated to rule on the request for hearing and/or petition for leave to intervene will grant the request/petition if it determines that the requestor/petitioner has standing under the provisions of paragraph (d) of this section and has proposed at least one admissible contention that meets the requirements of paragraph (f) of this section...

(1) Factors weighing in favor of allowing intervention--

(i) The extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record;

(ii) The nature and extent of the requestor's/petitioner's property, financial or other interests in the proceeding; and

(iii) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest;

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: January 2, 2007

Exhibit 1

Teleconference with the NRC

March 14, 2006

Re: Proposed Spent Fuel Exemption for the Susquehanna Nuclear Generating Station

*Comments of Eric J. Epstein, TMI-Alert**

Thanks for the opportunity to offer input and share my concerns on PPL's spent fuel cask exemption request.

On April 16, 2003 at the Nuclear Regulatory Commission's (NRC) annual RIC workshop in Rockville, Bryce Shriver from PPL gave a presentation on *Safety Management: An Integrated Approach*. Among the key areas he touched upon were "Work Management," "Operational Decision Making," "Design and Licensing Basis Control," and "Business Planning and Budgeting". He emphasized that PPL's processes together with their "Independent Oversight" and "Culture" would produce "Safety Performance."

This approach seemed to make sense as PPL prepared for relicensing and power uprates:

- The Company has contracted with GE Energy to prepare for additional uprates, i.e., Susquehanna 2 (1994) and Susquehanna 1 (1995) had 4.5% bumps. The 200 MWe uprates are scheduled to be implemented in phases during several refueling outages.

- Susquehanna Steam Electric Station, Units 1 and 2 are currently preparing for a license extension applications estimated to be somewhere from July-September 2006.

What went wrong?

* *Mr. Epstein is the Chairman of Three Mile Island Alert , Inc., is a safe-energy organization based in Harrisburg, Pennsylvania and founded in 1977. TMIA monitors Peach Bottom, Susquehanna, and Three Mile Island nuclear generating stations.*

It appears PPL has poorly managed human and technical resources to complete competing projects.

Background: PPL submitted a request for an exemption that would enable the plant to begin loading Framatome 9x9-2 spent fuel into the Nuhoms 61BT storage system. The Company is **not presently authorized to store the fuel.**

Statement of concern: This “precedent” (1) would bypasses normal review and approval processes for cask loading and penalize plants like Peach Bottom that have followed the NRC’s procedures and protocol.

In my opinion, granting the exemption would weaken the NRC’s regulatory protocol of firm, fair and consistent oversight.

Background: Normally, the NRC reviews exemption requests for changes the staff has already reviewed as part of an amendment to a cask certificate of compliance (COC). Such exemptions allow the utility to begin cask-loading before NRC completes its rulemaking process to formalize the amendment is complete.

Statement of concern: However, Transnuclear **has not yet submitted** the amendment request to make the change PPL needs. Any exemption would force the NRC to prematurely approve the cask to relieve a self-imposed economic hardship. There is a reason the Agency prides itself on a rigorous oversight process.

¹ Please note that PPL opposed the merger of Come Ed and PECO based on one principal - “precedent.”

PENNSYLVANIA PUBLIC UTILITY COMMISSION, A-00110550F014, OPINION AND ORDER, “Thus, PPL states that the Recommended Decision failed to address the distinction between the use of the settlement as “binding precedent” and its admissibility as evidence in future proceedings...”

Background: PPL claims the exemption is necessary because the plant will lose full-core offload capability in December, 2006 when it receives and begins to stage new fuel for Unit 2's 2007 refueling outage. Susquehanna had originally scheduled cask-loading to begin in October, 2006.

However, because of recent fuel channel performance problems at Unit 1, PPL expects Unit 2 will have to undergo a mid-cycle maintenance outage to inspect and replace any bowed fuel channels. That would limit space available in the pool, requiring the plant to accelerate its loading plans.

Statement of concern: An exemption would reward poor planning (2) of a utility that owns and operates one plant vs. AmerGen and Exelon that own and operate three plants in the state. (3)

| <u>Reactor Capability</u> | <u>Core Size</u> | <u>Lose Full Core Off load</u> |
|---------------------------|------------------|--------------------------------|
| Limerick 1 | 764 | 2006 |
| Limerick 2 | 764 | 2006 |
| Oyster Creek | 560 | LOST |
| Peach Bottom 2 | 764 | 2000 |
| Peach Bottom 3 | 764 | 2001 |
| Salem 1 | 183 | 2012 |
| Salem 2 | 193 | 2018 |
| Three Mile Island | 177 | NA |

| <u>Station</u> | <u>Dry Cask Technology</u> | <u>Deployment Date</u> | <u>Contractor</u> |
|----------------|----------------------------|------------------------|-------------------|
| Limerick | BD | Summer 2010 | TBD |
| Oyster Creek | NUHOMS 52B (4) | July, 2010 | None |
| Peach Bottom | Trans-Nuclear TN-68 | June, 2000 | Raytheon |

2 Poor resource planning by a Company headed by a systems manager, i.e., William F. Hecht, warrants an independent NRC evaluation, e.g., Augmented Inspection Team.

3 PENNSYLVANIA PUBLIC UTILITY COMMISSION, PECO's Response to Eric Epstein's Informal I-8.

4 Holtec has been chosen by AmerGen to provide dry cask services at Oyster Creek.

I am asking the NRC deny the exemption and preserve a fair and level regulatory playing field.

Exhibit 2

Backed Into A Corner: Cleaning Up Pennsylvania's Nuclear Power Plants

Prepared by:

Eric Joseph Epstein,
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Date: October 23, 2003

Table-1

**Limerick 1 & 2 , Peach Bottom 2 & 3, Susquehanna 1 & 2,
and Three Mile Island 1**

| <u>Reactor</u> | <u>Type/Mfg./AE</u> | <u>MW/Life & Death</u> |
|----------------|---------------------|----------------------------|
| Limerick 1* | (BWR/GE/Bechtel) | 1,055+/2/86-2024 |
| Limerick 2* | (BWR/GE/Bechtel) | 1,055+/1/90-2029 |

Note: 100% owned and operated by PECO Energy/Exelon Generation.

| <u>Reactor</u> | <u>Type/Mfg./AE</u> | <u>MW/Life & Death</u> |
|-----------------|-----------------------|----------------------------|
| Peach Bottom 1 | (HighTempGraphiteMod) | 40/(1966-1974) |
| Peach Bottom 2* | (BWR/GE/Bechtel) | 1,065+/7/74(2014; 2034) |
| Peach Bottom 3* | (BWR/GE/Bechtel) | 1,065+/1274(2014; 2034) |

Note: Connectiv sold 7.5% per unit share of Peach Bottom 2 & 3 to Exelon and PSEG. Although there is joint ownership, 50%/50% Exelon operates Peach Bottom 2 & 3.

Connectiv sold 7.5% per unit share of Peach Bottom 2 & 3 to Exelon and PSEG. PSEG is the majority owner (57.51%) and operates Salem 1 & 2).

| <u>Reactor</u> | <u>Type/Mfg./AE</u> | <u>MW/Life & Death</u> |
|----------------|---------------------|----------------------------|
| Susquehanna 1* | (BWR/GE/Bechtel) | 1,032+/6/83-2023 |
| Susquehanna 2* | (BWR/GE/Bechtel) | 1,091+/2/85-2025 |

Note: PPL owns 90% of both units and the Allegheny Electric Cooperative owns the remaining 10%.

| <u>Reactor</u> | <u>Type/Mfg./AE</u> | <u>MW/Life & Death</u> |
|-----------------------|---------------------|----------------------------|
| Three Mile Island -1* | (PWR/B&W/B&R) | 819+/40/ 1974-2014 |

Note: = 100% owned and operated by AmerGen/Exelon Generation.

Analyses of TLG's Operating Assumptions

All nuclear decommissioning studies rely on similar assumptions supplied by TLG Industries which is owned and operated by Entergy. TLG continues to base decommissioning estimates on "field" studies (1) extrapolated from small, minimally contaminated, and/or prematurely shutdown nuclear reactors. These estimates are based on Base Rate Case proceedings before the Pennsylvania Public Utility Commission ("PA PUC"). TLG Industries current estimates have increased **three fold since 1995**. The 1995 predictions witnessed a similar increase when compared to TLG's 1990 assessments.

The table below documents the gross miscalculations in decommissioning projections from 1985 through 1995.

Table-2

| <u>Generating Station(s)</u> | <u>1985 Study/1995 Study</u> | <u>\$ Increase</u> |
|------------------------------|------------------------------|--------------------|
| Limerick 1 & 2 | \$272m/\$986m | \$714m |
| Peach Bottom 2 & 3 | \$273m/\$947m | \$674m |
| Salem 1 & 2 | \$271m/\$701m | \$430m |
| Three Mile Island 1 (a) | \$60m(b)/\$368m or \$431m(c) | \$308-\$371 |

(a) GPU reported that the cost to decommission TMI-2 more than doubled in 48 months. By 1997, the decommissioning estimate had risen 110% in four years to \$433 million, 1997, GPU Annual Report.

(b) TMI-1 total, projected decommissioning expense based on ENTOMB, 1986, GPU Annual Report, p. 39.

(c) TLG's estimate as referenced in the 1998, GPU Annual Report, p. 59.
(Source: PECO Energy's Response to EE-I-4)

1 Shippingport (72 MWe; Light Water Breeder Reactor) is the largest commercial nuclear power plant to be fully decontaminated. The reactor vessel was shipped to the Hanford Reservation thus depriving the industry of critical hands-on decommissioning experience. In fact, Shippingport was dismantled and not decommissioned. Shippingport was owned and operated by Duquesne Light Company under special agreement with the Department of Energy.

ComEd, the other half of Exelon, has documented that net nuclear decommissioning costs have risen from 3,089 million in 1990 to 5,426 million in 1999. (PECO Energy's Response to EE-I-4.) (2)

Proportional Confusion

At the Susquehanna Steam Electric Station, projected costs for decommissioning have **increased by at least 553%** in the last 19 years. In 1981, PP&L engineer Alvin Weinstein predicted that PP&L's share to decommission SSES would fall between \$135 and \$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. The Company then contracted out for a site-specific study which projected that the cost of immediate decommissioning [DECON] would be \$725 million in 1993 dollars. The 1994 cost estimate remained steady at \$724 million, but the market value of securities held and accrued in income in the trust funds declined, and thus the estimate reflected another increase in decommissioning costs (PP&L Base Rate Case, Page, 1016, Lines 7-27 and Page 1017, Lines 1-24.)

The Susquehanna Steam Electric Station is owned by PP&L (90%) and the Allegheny Electric Cooperative (10%). The Allegheny Electric Cooperative (AEC) is responsible for 10% of the cost of decommissioning. PP&L's consultant, TLG, estimated PP&L's decommissioning share to be \$724 million. Therefore, the AEC is responsible for the remaining 10%, or \$79 million, of the \$804 million projected funding "target" for nuclear decommissioning. However, the AEC is saving for decommissioning by **setting aside 5%** (rather than 10%) of its projected share of nuclear decommissioning. Laurence V. Bladen, Director of Finance and Administrative Services told Mr. Epstein that AEC is basing its decommissioning estimates on **data supplied by PP&L** (Telephone conversation between Mr. Epstein and Mr. Bladen, March 30, 1995.)

² Comparative analyses of early ComEd estimates are unavailable: "A search of ComEd's records reveals that ComEd does not have records of the initial estimates of the indicated decommissioning costs" (PECO's Response to EE-Informal-I-4.)

(Telephone conversation between Mr. Epstein and Mr. Bladen, March 30, 1995.)
"Allegheny's portion of the estimated cost of decommissioning SSES is approximately \$37.8 million and is being accrued over the estimated useful life of the plant."

(Allegheny Electric Cooperative 1994 Annual Report, The Power of Initiative: Seizing Opportunities on the Horizon. Decommissioning Trust Fund, Cost of Decommissioning Nuclear Plant, p.49.)

Complicating the matter is PP&L's steadfast refusal to actively monitor AEC's obligations. Mr. Ronald E. Hill, senior vice-president of Finance for PP&L was questioned by Mr. Epstein during the PP&L Base Rate Case (1995) on the relationship between AEC and PP&L, and he exhibited this distant and negligent attitude:

Q: Have you read Allegheny Electric Cooperative's annual report from last year by any chance?

Witness: I believe I glanced at it, but I can't recall specifics (Page 448, Lines 15-22.)

Q: Can you tell me why they're [AEC] only putting aside \$37.8 million?

Witness: "Not specifically except they're probably using a different estimate than we used" (Page 449, Lines 5-8.)

Q: "Allegheny could be planning it [decommissioning] on entomb, they could be planning it on decon?"

Witness: "They could be basing they're estimate on the NRC required funding level, too. There are several different methodologies of coming up with the estimate to decommission plants."

Q: "But it's possible that you could be putting aside money -- I believe, actually, your method is decon and their method is safe store."

Witness: "I don't know what their method is. I don't believe it's safe store."
(PP&L Base Rate Case, Page 450, Lines 11-25 and Page 451, Lines 1-12.)

Unfortunately, **AEC does not know** what method it is employing to calculate decommissioning costs either. On March 30, 1995, Mr. Epstein contacted Mr. Bladen of the Allegheny Electric Cooperative. Mr. Bladen informed Mr. Epstein that decommissioning costs were based on estimates supplied by PP&L. Bladen noted: "It's not like we could decommission [Susquehanna] using a different method." However, Mr. Bladen could not identify the decommissioning mode. Mr. Epstein called again on May 12, 1995 and Mr. Bladen informed him that the method for decommissioning Susquehanna was "Greenfield." Mr. Epstein informed Mr. Bladen that Greenfield is not a decommissioning mode and Mr. Bladen responded, "I'll have to do some further checking." Mr. Epstein recontacted Mr. Bladen on June 5, 1995, at which time Mr. Bladen replied, "I keep asking the engineers. I know its not **ENTOMBMENT**."

Mr. Bladen is charged with financial oversight of AEC, and although sincere and responsive, has absolutely no idea about the method and financial expectations associated with the decommissioning of Susquehanna.

The impact of this uncertainty between decommissioning partners is crucial and potentially debilitating. Since PP&L has no enforcement mechanism to compel Allegheny Electric to fund 10% of the decommissioning costs for SSES, the question of financial responsibility looms large. Mr. Epstein queried the Company witness during PP&L Base Rate Case (1995), Mr. Ronald Hill, about the relationship:

Q: "But there is actually no coordination?"

A: "There is coordination, but they're under no obligation to accept our estimate and to fund in the same manner that we do. They are obligated to come up with their share of the money at the end."

Judge Christianson: "Coordination but not control."

Witness: "That's right your honor."

Q: "Do you know what method right now they're anticipating Susquehanna will be decommissioned as?"

A: "No, I don't."

Q: "So it's possible they may be envisioning the decommissioning of Susquehanna say, entomb, whereas right now you're envisioning it as decon?"

Witness: They may be (Page 450, Lines 11-25 and Page 451, Line 1-12.)

The Allegheny Electric Cooperative is owned and controlled by fourteen (14) distribution cooperatives. The AEC is not regulated by the Public Utility Commission nor does the company have publicly traded stock. Therefore, there is no behavior modifying mechanism afforded to state regulators or PP&L shareholders to oversee AEC's contributions. If current trends continue unabated, AEC's expected decommissioning savings will be grossly inadequate and will therefore undermine PP&L's decommissioning plans for Susquehanna.

Non-Radiological Decommissioning

The cost estimates for non-radiological decommissioning, (an imprecise term), are not mandated by the NRC although the agency stipulates that all nuclear power plants be returned to Greenfield, i.e. the original environmental status of the facilities prior to construction of the nuclear power plant. Furthermore, Greenfield has not been achieved by any large commercial nuclear plant and utilities are not required to save for this mandated eventuality, placing additional strain on the companies ability to finance radiological and non-radiological decommissioning.

Q. 6. a. "How much additional moneys does the Company estimate will be needed for non-radiological decommissioning in order to restore the site to "Greenfield?"

b. "How is PP&L saving for this mandated eventuality?"

A. 6. "A. None. Non-radiological equipment was included in the TLG decommissioning study."

b. "See response to item A."

(Pennsylvania Power & Light Company Response to Interrogatories of Eric Joseph Epstein, Dated June 3, 1997.)

Low Level Radioactive Waste Isolation

TLG provided nuclear waste storage and nuclear decommissioning costs estimates for all Pennsylvania utilities regulated by the Public Utility Commission. However, TLG's testimony during the 1995 PP&L Base Rate Proceeding discredits their projections. Mr. La Guardia, President of TLG, based his cost estimates for low-level radioactive waste disposal on the assumption that the Appalachian Compact would be available when the SSES closes (PP&L Base Rate Case, Page 1034, 17-20). He concluded that the disposal of LLW is the most expensive component (3) in the decommissioning formula (Page 2091, Lines 21-25.) Furthermore, Mr. LaGuardia conceded it may be necessary to recompute cost estimates for disposal because it now appears imminent that Barnwell will open for seven to ten years for all states except North Carolina (Page 2108, Lines 4-9.) However, the Company has not yet taken the step of reconfiguring costs of LLW disposal now that Barnwell has been open since **July 5, 1995**.

Q. 7. "Has TLG or the Company recomputed decommissioning estimates since Barnwell has reopened?"

A. 7. "No." (Pennsylvania Power & Light Company Response to Interrogatories of Eric Joseph Epstein, dated June 3, 1997.)

³ LLW "disposal" fees account for 15% to 25% of the total cost of radiological decommissioning.

TLG used "rate schedules" for Barnwell **and** Envirocare claiming it may prove more "cost effective" to ship LLW to Utah rather than South Carolina (Limerick p. xi, Peach p. 187, and Salem p. 10). **This claim is absurd and is based on speculation that a nonmember of a Compact could gain access to another site because the nonmember was paying more for LLW isolation at its own restricted facility.**

TLG has failed to qualify and quantify the proportion, volume, curie content and classes of waste being shipped to Barnwell as opposed to Clive. However, it is implied in Appendix B (based on the cost of cask-liners) that all LLW will be shipped to "CNSI", i.e., Barnwell (Limerick, p. 8).

Please note that HB 237 before the Utah House Political Subdivisions Committee seeks to **ban Class "B" and Class "C" Wastes** (*Salt Lake Tribune*, February 14, 2003). And Charles Judd, the former President of Envirocare is seeking to build a new radioactive landfill right across from Envirocare's existing site in Tooele County. Judd's proposal comes:

...amid a firestorm of controversy in Utah about radioactive waste. In the fall [of 2003] voters defeated Initiative 1, a measure that would outlaw hotter waste and boost taxes on low-level waste already permitted. Meanwhile, the state is battling a high-level waste site proposed for the Skull Valley Goshute Reservation, and some state leaders are talking about the the prospect of a second high-level site, dubbed plan B (*More Nuclear Waste to Be Coming Utah's Way*, "Salt Lake Tribune", February 15, 2003).

Since Limerick will be coming off-line last, the assumption should be that the waste will be transported to Utah. However, the State of Utah has not given approval for Envirocare's site to handle Class "B" and "C" LLW, and the Goshute Reservation storage facility remains in abeyance. In fact, Utah is actively attempting to bar the importation of Class "B" and "C" waste (Refer to 1.3.2).

If Barnwell closes in 2008, the only alternatives for LLW disposal are in Utah. TLG assumes that Barnwell and Envirocare (which currently accepts only Class "A" LLW) are suitable "prox[ies]" for cost predicting purposes (Limerick, Section 1, pp. 5-6, Peach p. 196, and Salem p. 19). In fact, TLG has explicitly and implicitly recognized that "B" and "C" wastes are shipped to Barnwell, e.g., "More highly contaminated and activated materials will be sent to Barnwell" (Limerick, Section 3, pp. 11-12, Peach, Section 3, p. 11, and Salem, p. 40).

Recently, the Southwestern Compact (Arizona, California, North and South Dakota) asked the federal government to "revisit" the issue of LLW management since no new site has been opened in 20 years.

Please note that LLW costs may be further ameliorated by the NRC's proposal of 56 "realistic reuse scenarios" that would allow, "Nuclear power plant operators to market their radiologically constrained soils to construction companies, farmers, golf courses and other commercial entities..." Some of the proposed consumer uses include: paving; bricks; ash fill, and fertilizer. (*Environmental News Service*, October 19, 2000)

TLG needs to get past inert definitions, i.e., "Very low-level radioactive material...will be sent to Envirocare. More highly contaminated and activated material will be sent to Barnwell" (Limerick, Section 3, pp. 3-4, Peach, Section 3, p.11, and, Salem p.40). Low-level radioactive waste isolation requires: 1) Classification by curie content; 2) Estimated number of LLW shipments from each reactor to Barnwell and Clive; 3) Factor waste compaction at SEG; and, 4) Provide estimates of mixed-waste disposal costs.

Low level radioactive waste projections need to be adjusted upward to factor license extensions, and account for recent legal developments. For example, the federal government and nuclear industry have instituted a strategy of manipulating waste classifications and definitions nuclear as a means of "disposing" nuclear waste.

WASHINGTON, Sept. 30 - The Energy Department has asked Congress to allow it to redefine some nuclear waste so it can be left in place or sent to sites intended for low-level radioactive material, rather than being buried deep underground.

Department officials say they thought they had flexibility in classifying what constituted high-level nuclear waste, but in July, a federal district judge in Idaho ruled that the department's plan for treating waste there violated the Nuclear Waste Policy Act, a 1982 law requiring the deep burial of high-level waste.

The argument concerns tens of millions of gallons of salts and sludges left over from weapons production that are now in tanks in Idaho, South Carolina and eastern Washington. High-level waste is supposed to be encapsulated in glass for burial. The department has chosen Yucca Mountain, Nev., as the repository site, but the site has not yet opened and when it does, it will not be big enough for all the solidified wastes and spent reactor fuel.

In the Idaho case, the Energy Department had said that some of the high-level waste was "incidental" and need not be removed from the tanks. The Natural Resources Defense Council and the Snake River Alliance, a local environmental group, along with two Indian tribes, successfully argued that the order violated a longtime policy that high-level waste must be deeply buried.

The ruling also could affect waste from a defunct civilian reprocessing plant in West Valley, N.Y., near Buffalo. The waste has already been solidified, and department officials said Tuesday that the resulting glass logs would be shipped for deep burial. But the officials said that contaminated buildings and equipment there might be left on site.

A department official said, however, that it would not change what was acceptable at the Carlsbad plant, which is designed for plutonium and other long-lived materials.

Tom Cochran, a nuclear expert at the Natural Resources Defense Council, said, "Basically what they're doing is allowing the D.O.E. to abandon high-level waste and treat it under standards written for low-level waste."

High-Level Radioactive Waste Management

Nuclear decommissioning studies assume a facility for high-level radioactive waste (HLW) will be operational by 2015 (Limerick, p. xii & Section 1, p. 5; Peach p. 188 & p. 195, Salem p. 11 & p. 18). Ironically, all studies carefully traced the decades-old trail of delays. Without explanation, TLG now assumes a repository will be ready in a timely fashion (Limerick, Section 1, pp. 4-5, Peach pp. 194-195, Salem pp. 17-18). Even if this optimistic scenario is realized it will be irrelevant. Based on Peach Bottom's license extensions and Limerick and Salem's estimated operating lives, all three plants will be operating past 2020.

The Studies do not indicate if the Waste Isolation Pilot Project (WIPP) MRC facility is assumed to supplement Yucca Mountain. WIPP would have limited use in that the 2,150' deep geologic repository operated by the Department of Energy (DOE) only accepts transuranic wastes. Perhaps the stopgap site TLG has in mind is the "temporary" nuclear waste facility (40,000 tons for 40 years) proposed on the Skull Valley Goshute Indian Reservation in Utah which is not approved.

Even if spent fuel storage capacity is increased, the additional cost will have a significant impact on decommissioning. For example, at the Susquehanna Steam Electric Station **spent fuel costs were omitted from TLG's decommissioning estimate**: "None of the estimates we have prepared include the cost of disposal of spent nuclear fuel," PP&L Base Rate Case, Page 1032, Lines 20-12). But spent fuel is the main contributing factor in the escalation of decommissioning costs at Yankee Rowe. Thomas LaGuardia, the Company's witness, admitted the increase during cross examination:

Mr. Epstein: "Are you aware that the cost has increased for the decommissioning of Yankee Rowe from \$247 million to \$370 million over the last two years?"

Witness: "Yes. I'm aware of what the estimate concludes."

Mr. Epstein: "And half of the cost was attributable to spent fuel storage?"

Witness: "That's correct" (PP&L Base Rate case, Page 1029, Lines 16-22.)

Isolation of high-level radioactive waste, which is primarily composed of spent nuclear fuel, **can not be separated from nuclear decommissioning**. At the earliest, Yucca Mountain will be available in 2010. If Yucca opened today, it would be forced to confront "under capacity" and "overflow" from 103 nuclear reactors storing 50,000 tons of waste at 72 sites in 33 states. This number can only grow. An average reactor generates up to 30 metric tons of HLW annually and that figure does not include power uprates. Nuclear generating stations can not be immediately decontaminated and decommissioned with the presence of spent fuel onsite or inside the reactor vessel. Aggressive and destructive decontamination cleanup processes will be unavailable until spent fuel is removed the nuclear generating stations' temporary storage facilities. Additionally, front-end decommissioning tasks require skilled workers for site-specific tasks. Labor costs are erratic and should be linked to inflationary indices. The NRC and the nuclear industry devote scant resources to decommissioning research and development. This laissez-faire approach should not be rewarded by financially penalizing rate payers and tax payers.

Radioactive Scrap Metal & Rate Payer Equity

Nuclear companies need to account for radioactive scrap metal (RSM) values, cannibalization of parts, potential sale value of consumer grade materials, and the impact of NRC regulations that allow for "Below Regulatory Concern" ("BRC") waste to be sold on the open market. The status quo is unacceptable.

Table-3
Estimated Radioactive Scrap Metal

| | | |
|--------------|-------------|--------------|
| Limerick | 81,733 tons | (C-2, p. 23) |
| Peach Bottom | 46,865 tons | (C-2, p. 21) |
| Salem | 54,443 tons | (C-2, p.22) |

RSM goes to straight to the heart of rate payer abuse and intergenerational equity. Rate payers need to be protected from poor management and duplicitous fiscal projections. And rate payers should be allowed to capture the full value of their hostage investment. Failing both, consumers will be forced to service debts for which they receive little to no service.

Transportation Methods

Transportation Costs have increase slightly, but these projections assumed LLW and HLW destinations are all **beyond** 500 miles (1995-1996 assumption). Moreover, compaction transportation costs are either omitted or unidentified.

TLG's credibility is undermined by ignoring and flat out missing the boondoggle associated with Southern California Edison's (SCE) aborted plan (February, 2003) to ship a 900+ million ton radioactive reactor, fused with concrete and metal, that was once San Onofre-1 (4).

SEC's original plan was to truck the San Onofre-1 reactor vessel to a barge where it would be set on a voyage to the Panama Canal...The railroad refused to carry the cask. Next, the Panama Canal Authority refused entry because the radioactive casket is six times heavier than the allowable limit, and the Port of Charleston refused entry (twice!). San Onofre-1, TLG's **self-proclaimed successful decommissioning operation**, remains in San Diego...

Postscript

ROSEMEAD, Calif. - Southern California Edison has arranged a route to ship its defunct nuclear reactor to a South Carolina disposal site, and the three month long trip could begin within weeks, a company spokesman said.

The 668-ton reactor will be driven from the San Onofre Nuclear Generating Station to Camp Pendleton, and will be shipped about 11,000 miles by barge around the tip of South America to Charleston, S.C...

Earlier this year, the Panama Canal Authority refused to grant a weight waiver to ship the reactor through the 50-mile waterway. The Port of Charleston said in February it would deny entry of the reactor due to terrorism concerns, but Golden said those fears have been allayed.

⁴ San Onofre-1, a 436 MWe, PWR, went on line in January, 1968, and operated for 35% of its projected operating life and was prematurely retired in November, 1992.

The plant is owned by Southern California Edison (80%) and San Diego Gas and Electric (20%).

Conclusion

No prudent financial officer operating outside of the nuclear industry in the real world of Sarbanes-Oxley would accept funding formulas and rate recovery strategies that relies on so many fluid caveats and assumptions. David Hayward, president of Hayward Consulting stated, "...nuclear plant owners have historically underestimated the cost of decommissioning nuclear power plants. Third, the issue of disposing nuclear waste has not been fully settled" (*Public Utilities Fortnightly*, "Plant Valuation: Book Value and Beyond", September 1, 1999, p. 58).

Nuclear power remains a heavily subsidized industry. The Bush Administration and Republican leaders have strayed from their free enterprise mantra to facilitate development a new generation of reactors. "Congress could pass a measure that would guarantee about \$15 billion in loans to nuclear power plant developers, all to offset the high, upfront capital costs that are preventing them from taking risks. It coincides with another bill to reauthorize the Price-Anderson Act that has limited nuclear power operators' liabilities risks since 1957 to \$9.3 billion." (5)

License extensions have created funding scenarios similar to fossil generating "service lifes". Over-recovery, based on **"service life" (45 to 55 years)** as opposed to **"life spans" (30 to 40 years)** should be factored as a contingency in decommissioning planning. Exelon is in the same quandary as other generators: "However, at this time, the Company cannot predict future changes in decommissioning technology, decommissioning costs or nuclear regulatory requirements. Accordingly, the Company cannot anticipate future decommissioning cost requirements or the associated rate recovery levels.

("Q. & A. 157", PP&L's Response to Interrogatories of the Environmentalists, Set 3, Dated: May 19, 1997).

5 "Nuclear Power Has Yucca Mountain to Climb", Ken Silverstein , Director, Energy Industry Analysis, Wednesday, October 22, 2003.

Exhibit 3: PPL Refuses to Pay Taxes

- **Utility refuses to pay**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: May 12, 2002

Publication: York Dispatch, The (PA)

Officials in Northeastern School District, where more than 20 percent of the residents live below the poverty line, have proposed cutting textbooks, maintenance, technology and athletics. But they are still more than \$850,000 short of balancing the budget for next school year.

If only PPL Corp. would pay its taxes, district officials say.

- **Power play on taxes**

Date: May 14, 2002

Publication: York Dispatch, The (PA)

Pennsylvania's deregulation of the electric utility industry just keeps proving the old adage "if it looks too good to be true, it probably is."

A few years ago, deregulation boosters said it would instill competition in the marketplace, driving down costs by forcing power generators to compete for your business.

Has that happened?

Not really, at least not for residential customers. The "savings" were so meager or restrictive or hard to understand...

- **PPL should pay its property taxes**

Date: June 6, 2002

Publication: York Dispatch, The (PA)

An open letter to William Hecht, chairman, president and CEO of PPL Corp.:

I find it most disconcerting that your company prints the following pledge on educational materials you distribute to schools across the commonwealth. In spite of the pledge, you continue to avoid paying real estate taxes owed the Northeastern School District.

From the back page of a PPL program called, "Charged Up For Choice."

- **Citizens picket PPL on taxes**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: June 6, 2002

Publication: York Dispatch, The (PA)

More than 20 Northeastern School District residents and their children confronted PPL Corp. officials in Mount Wolf yesterday evening, demanding to know when the company would pay the cash-strapped district \$2.2 million in back taxes.

Rather than duck the sign-waving crowd, Brunner Island plant superintendent Greg Smith and corporate spokesman George Biechler took the heat, presenting the Allentown-based energy company's side of the property tax dispute.

- **Pay fair share, PPL**

Date: June 9, 2002

Publication: York Dispatch, The (PA)

We'll give PPL Corp. executives this much credit: At least they didn't try to duck a public confrontation.

Officials with the \$5.7 billion-a-year power company didn't cancel a dinner with school and municipal officials at the Mount Wolf VFW last week when word got out that a public demonstration would be held outside. They didn't sneak in a back door, or push through the crowd mumbling "no comment."

They stood their ground and defended their...

- **Power plants work on tax agreements**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: June 16, 2002

Publication: York Dispatch, The (PA)

While PPL Corp. and residents of the Northeastern School District are locked in court battles and public confrontations over taxation of the Brunner Island power plant, other electric utilities in York County are negotiating tax agreements without getting residents steamed.

Exelon Energy, owner of the Peach Bottom Atomic Power Station in Peach Bottom Township, is contesting its \$304 million assessment, but it pays more than \$1 million a year in property taxes as part of an interim...

• Northeastern taxes go up

Author: JENNIFER GISH Dispatch/Sunday News

Date: June 25, 2002

Publication: York Dispatch, The (PA)

The Northeastern School District last night passed a 2002-03 budget that totals \$27.4 million and includes a 1.27-mill tax increase.

For the average homeowner in the district with a property valued at \$64,051, that means an additional \$81 in taxes, and a total tax bill of \$1,206.

The 2002-03 budget shows a 6.3 percent, or \$1.6 million, rise in spending over 2001-02. That cost increase includes \$664,864 for salary hikes, \$96,500 for rising utility bills, \$85,000 for special...

• PPL's Brunner Island slated for tax auction

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: June 28, 2002

Publication: York Dispatch, The (PA)

While PPL Corp. has maintained it will not pay outstanding property taxes on its Brunner Island power plant until a court settles a dispute over its assessment, the York County Tax Claims Bureau may force its hand.

The bureau mailed notices last month to all county taxpayers who have not paid their 2000 property taxes, saying their properties will be auctioned at a tax upset sale Oct. 12 unless they pay up.

The Brunner Island plant would be sold for a minimum of approximately \$2.8

• Northeastern taxpayers have PPL on defensive

Date: June 30, 2002

Publication: York Dispatch, The (PA)

I found it interesting that PPL Corp. has sounded general quarters and set damage control in terms of the issue between them and Northeastern School District. After 21 1/2 years, this issue is finally catching up to them. I find it even more interesting that Mr. Biechler has such a select memory. Permit me to go on.

Until June 5th, when local citizens protested PPL at a local function, we have heard nothing from them. At that time (June 5), Mr. Biechler and Mr. Smith, plant superintendent...

- **Tenant takes PPL to court**

Author: ELIZABETH EVANS Dispatch/Sunday News

Date: July 7, 2002

Publication: York Dispatch, The (PA)

Already \$2.8 million behind in property taxes on its Brunner Island power plant, PPL Corp. is fighting a \$900,000 lawsuit filed by a fish-farm tenant at the island.

Susquehanna Aquacultures Inc. is suing the Allentown-based power company, claiming that 130,800 of its hybrid striped bass died when a plant fire in March 2001 shut down the only PPL generator supplying the farm with fresh water.

PPL spokesman George Biechler declined to comment, saying the company doesn't discuss...

- **PPL fights back in tax battle**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: July 11, 2002

Publication: York Dispatch, The (PA)

PPL Corp. is suing two county agencies and the Northeastern School District to stop the sale of its Brunner Island power plant for failure to pay nearly \$1 million in 2000 property taxes.

The Allentown-based power company isn't asking the county court for money from the defendants, just to stop the Oct. 12 tax sale.

In fact, if the suit succeeds, PPL would be compelled to finally start paying the property taxes it has owed for two years -- but based on a far lower assessment...

• **PPL's tax dispute grows more complex**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: October 18, 2002

Publication: York Dispatch, The (PA)

York County did not sell PPL Corp.'s Brunner Island power plant for back taxes as scheduled last week, and the power company's tax dispute seems to be growing ever more complicated.

Allentown-based PPL has refused to pay property taxes on the plant in the Northeastern School District for 2000 and 2001 because it claims the assessed value, originally set by the county at \$43 million, was grossly inflated.

PPL did, however, pay \$788,067 in September for its 2002 taxes.

• **Property tax issue near resolution**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: May 15, 2003

Publication: York Dispatch, The (PA)

PPL Corp. and the Northeastern School District are close to resolving their property tax dispute over the Brunner Island power plant, just days after PPL reached a settlement with a Lancaster County school district.

Allentown-based PPL and Northeastern have been locked in the Brunner Island dispute ever since Pennsylvania changed the way it taxes power plants.

The change, part of the deregulation of the electricity industry, took effect in January 2000.

Published on June 16, 2003, York Daily Record (PA)

• **ACROSS YORK COUNTY: NORTHERN YORK Budget approved**

The Northern York County School District unanimously approved its 2003-04 budget Thursday evening. The new, \$27.4 million budget will be financed with a 14.15-mill real estate tax, an increase of 0.80 mills, and an earned income tax rate of 1.25 percent.

Action: Brian Small, district superintendent, said next year, even with the \$45 million in new construction done in the last five years, residents of the district would pay the lowest millage rate in York...

• **PPL, Exelon fight tax assessments**

Author: CARYN TAMBER Dispatch/Sunday News

Date: July 20, 2003

Publication: York Dispatch, The (PA)

The tax dispute that has kept much-needed dollars from the Northeastern School District is creeping toward resolution, but the cash-strapped district continues to struggle.

Northeastern has been locked in a property tax dispute with Allentown-based PPL Corp. for years. PPL has paid very little in taxes on its Brunner Island Steam Electric Station since the state deregulated the power industry in the late 1990s.

Published on July 22, 2003, York Daily Record (PA)

OUR OPINION: Deregulation slams taxpayers Electric companies' big fight over taxes looks like nothing more than a profit ploy.

The benefit of having a big utility company nestled among a town's homes and businesses comes right down to taxes.

Big company, big value, big taxes.

But it hasn't played out that way for the Northeastern School District. Instead, the school district is saddled with a court dispute against Pennsylvania Power & Light over taxes, and, it turns out, other municipalities and school districts across the state are in the same...

• **PPL to pay taxes**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: November 25, 2003

Publication: York Dispatch, The (PA)

PPL Corp. and the Northeastern School District have signed an interim tax deal for the Brunner Island power plant, and the two parties now have a basis to negotiate a final settlement establishing how much the company will pay.

The Allentown-based energy company and the school district signed a deal in September setting the appraisal on the plant and adjacent land at \$5.4 million until the Common Pleas Court decides on a final appraisal. The deal creates a basis for PPL to pay property taxes

Published on December 2, 2003, York Daily Record (PA)

• **Northeastern schools, PPL settle tax dispute The district will receive more than \$750,000 in back taxes for a power plant.**

At Monday's Northeastern School Board meeting, board president Rebekah Gross said, "Friends, I have good news."

After several years of the school board and Pennsylvania Power & Light disputing the assessed worth of PPL's Brunner Island generating facility, the two sides agreed to settle, and the school district will get more tax money as a result.

The agreement with PPL states that the assessed value of the property, on Brunner Island in the Susquehanna River

• **Real estate tax dispute is settled**

Author: CHARLIE YOUNG Dispatch/Sunday News

Date: December 5, 2003

Publication: York Dispatch, The (PA)

Northeastern School District and PPL Corp. have agreed on a property assessment of \$15 million for the utility's Brunner Island power plant.

The agreement resolves a series of back-and-forth court suits over the value of the plant for tax purposes after the state deregulated the electricity industry in 2000 and shifted taxation of utility real estate to the local level.

PPL is expected to send a check in the amount of \$762,786 to the district for taxes owed since January 2000 through

Exhibit 4:

Chronology of Legal History

- **March 28, 1979, 4:00 a.m.** - Beginning of Three Mile Island (TMI) Unit-2 core melt.

- **March 30, 1979** - Governor Richard Thornburgh recommended an evacuation for preschool children and pregnant women living within five miles of the plant. Schools in the area closed. Out of a target population of 5,000, over 140,000 Central Pennsylvanians fled the area.

- **December 1979** - Due to the meltdown at Three Mile Island Unit-2, President Carter issued Executive Order 112148. The Order directed the Federal Emergency Management Agency (FEMA) and the NRC to implement Radiological Emergency Response Plans for all populations living around nuclear power plants.

- **August, 1980** - Funding and financial responsibility for providing offsite planning is listed in the Federal Register/Vol. 45, No. 162 /Tuesday, August 19, 1980 /Rules & Regulations. (10)

10 IX. FUNDING: In view of the requirements in these rule changes regarding the actions to be taken in the event State and local government planning and preparedness are or become inadequate, a utility may have an incentive, based on its own self interest as well as its responsibility to provide power, to assist in providing manpower, items of equipment, or other resources that the State and local governments may need but are themselves unable to provide. The Commission believes that the view of the President's Statements of December 7, 1979, giving FEMA the lead role in planning and preparedness, the question of whether the NRC should or could require a utility to contribute to the expenses incurred by State and local governments in upgrading and maintaining their emergency planning and preparedness (and if it is to be required, the mechanics for doing so) is beyond the scope of the present rule change. It should be noted, however that any direct funding of State or local governments solely for emergency preparedness purposes by the Federal government would come through FEMA.

• **June 1983** - The Susquehanna Steam Electric Station Unit-1 came on line.

• **February 29, 1984** - A plea bargain between the Department of Justice and Met Ed settled the Unit 2 leak rate falsification case. Met Ed plead guilty to one count, and no contest to six counts of an 11 count indictment. The Company also agreed to pay a \$45,000 fine, and establish a \$1 million dollar interest-bearing account to be used by the Pennsylvania Emergency Management Agency.

• **February 1985** - The Susquehanna Steam Electric Station Unit-2 came on line.

• **November 3, 1986** - Federal regulation put in place, Guidance Memorandum EV-2 "Protective Actions for School Children" (**GM EV-2**), that **requires appropriate state and local government agencies to provide all licensed childcare facilities residing in Emergency Planning Zones (EPZ)** with pre planned radiological emergency services including, but not limited to notification, transportation, and relocation centers.

• **March 31, 1987 - Peach Bottom was indefinitely shutdown.** Operators were found sleeping on the job, playing video games, engaging in rubber band and paper ball fights, and reading unauthorized material.

• **February 7, 1993** - An **intruder drove past TMI's guarded entrance** gate, crashed through a protected area fence, crashed through the turbine building roll-up door, and hid in a darkened basement of the plant for almost four hours before being apprehended by guards.

• **September 11, 2001** - Larry Christian, an area resident, picked up his daughter at nursery school located near Three Mile Island due to terrorist attacks in Pennsylvania, Washington D.C., and New York.

• **October 2001-August 2002** - Mr. Christian inquired about his daughter's nursery school's radiological evacuation planning procedures and learned that they had none. Mr. Christian contacted numerous officials at the NRC, FEMA, and PEMA (as well as many other state and local emergency management officials) to find out what radiological evacuation planning requirements existed for preschool children. Mr. Christian learned there were **no requirements for preschool children** to have Radiological Emergency Response Plans after receiving the enclosed correspondence from Kay Carman, York County's Director of Emergency Management:

>From: "Carman, Kay" <KACarman@YCEX01.york-county.org>

>To: "ldc@pa.net" <ldc@pa.net>

>Subject: Day Care Centers

>Date: Fri, Aug 16, 2002, 9:43 AM

>

> Dear Mr. Christian, I do apologize for not responding as quickly as I had
> promised. I have researched your concerns and will attempt to answer them.

>

> Our office has been in contact with the Department of Public Welfare. This
> agency either licenses or regulates day care centers within the
> Commonwealth. In conversation with the DPW, the question was asked if day
> care centers were required to have comprehensive plans for all emergencies
> along with evacuation procedures and the answer was no, they did not. The
> centers were to have a procedure in case of fire only.. The only way that
> the DPW could mandate day care centers to have plans would be through
> legislation, which is not in place at this time.

> The role of the County is one of support to the municipality. Therefore we
> have been in touch with the municipalities you mentioned in your
> correspondence and will support their efforts to have the day care centers
> develop plans for all types of hazards. Of course we are not able to mandate
> that the day care centers comply. Hopefully, as the centers see the need
> for comprehensive planning with the assistance of the municipalities, we
> will be able to get "all" day care centers through out the County to have
> comprehensive plans and not just those centers that are within 10 miles of
> nuclear power plants.

> Should you require further information, please do not hesitate to contact
> me.

> Sincerely,

> Kay Carman >

<<KACarman@york-county.org (E-mail).vcf>>

• **November, 2001** - TMI-2 Possession Operating Licensee was formally transferred from GPU Nuclear to FirstEnergy. The NRC **did not evaluate special needs' emergency preparedness as a condition of the license transfer.**

• **August 2002** - Christian, together with Eric Epstein, Chairman of the local community based organization, TMI-Alert, Inc., researched and drafted a Petition for rule making changes to the U.S. Nuclear Regulatory Commission to include preschool children in the federally required Radiological Emergency Response Plans. Mr. Christian and TMI-Alert gathered over 1,200 signatures in support of the Petition, including Pennsylvania House Representative Bruce Smith (R-York County) on September 16, 2002. Additional support would be registered by Pennsylvania Attorney General Mike Fisher (R) on May 22, 2003, and Harrisburg Mayor Steven Reed (D) on August 7, 2003.

• **September 4, 2002** - Mr. Christian and Eric Epstein submitted Petition PRM 50-79 with 1,200 supporting signatures to the U.S. Nuclear Regulatory Commission. The Petition sought changes to include preschool children in the federally required Radiological Emergency Response Plans. The Petition was published in the Federal Registry under Docket No. PRM 50-79.

• **January 10, 2003** - PEMA Director Carl C. Kuehn submitted a letter to the NRC which **recommended denial** of the Petition and stated, "As the rules exist now, any nursery or day-care center may opt to participate in Radiological Emergency Preparedness program on a voluntary basis. This is sufficient."

• **May 19, 2003** - Information and requests were sent to newly elected Governor Rendell (D) asking for immediate measures to provide Radiological Emergency Response Planning for preschool children. In response PEMA Director, David Sanko sent Mr. Christian a letter stating that PEMA was **recommending denial** of the Petition saying it was "another highly prescriptive federal regulation."

• **May 22, 2003** - Letter from Attorney General Mike Fisher to Governor Rendell which states, "The **lack of pre-planning and inclusion of daycare centers and nursery schools in the evacuation efforts**, in the event of an emergency incident at a nuclear power facility, would result in onsite confusion regarding the safety of the children entrusted to these facilities" (**Bold face type added.**)

• **August 10, 2003** - *The Patriot News* ran the first of many articles on this topic entitled, "Evacuation plans sought for preschools – Facilities near nuke plants aren't required to have policies". PEMA Director David Sanko stated "We just don't think that the NRC ... or state government should be establishing rules that usurp a parent's right."

• **September 2003 to Spring 2004** - Public pressure is generated as a result of publicity. Mr. Epstein and Mr. Christian met with representatives from the Governor's Office. The **Governor reverses PEMA position** as defined under Governor Schweiker. Governor Rendell's Office retracts letter to the NRC recommending denial of the Petition and announces release of Title 55 requirements for preschool facilities to have emergency response plans.

Title 55 **required the day-care centers and nursery schools**, not the state and local government agencies, to be responsible for all preschoolers' radiological emergency response plans. Title 55 is **not in compliance with federal regulations 10 CFR 50.47; 10 CFR 50.54; 10 CFR Part 50 Appendix E and 44 CFR 350** because it requires day-care centers and nursery schools, not the state and local government agencies, to be responsible for all preschoolers' radiological emergency preparedness planning.

• **December 22, 2003** - British Energy completed the sale of its 50% AmerGen interest to Exelon Generation shortly after receiving shareholder approval. Exelon was British Energy's partner in the AmerGen joint venture that bought three U.S. nuclear plants--Clinton, Oyster Creek and Three Mile Island-1 (*Platts Nuclear News*). The NRC **did not evaluate special needs' emergency preparedness as a condition of the license transfers.**

- **May 2004** - Preliminary review by Federal Emergency Management Agency Director, Craig Conklin, results in a recommendation of denial of Petition PRM 50-79 on the grounds that the requests are covered under current regulations GM EV-2.

Due to Mr. Conklin's comments, Mr. Christian and Mr. Epstein reviewed laws regarding special populations' Radiological Emergency Response Planning requirements, i.e., GM EV-2 under federal law 10 CFR 50.47; and 10 CFR 50.54; and 10 CFR Part 50 Appendix E; and 44 CFR 350 already require the Petition's requests and have so since 1986.

- **June 18, 2004** - Epstein and Christian meet with Governor Rendell's Special Assistant, Adrian King, Jr., Esquire, to inform the Administration that Pennsylvania is currently in violation of these federal laws. The Governor's Counsel agrees to a review of Mr. Christian and Mr. Epstein's findings of law.

- **June 24, 2004** - Governor Rendell's Statement of Policy Title 55 issued through the Department of Public Welfare takes affect, and **does not differentiate between public, private and religious facilities as Senate Bill 922** did (See July 12, 2004).

- **July 12, 2004** - Legislation that Governor Ed Rendell allowed to pass into law (without his signature) required **only for-profit** centers to develop evacuation plans to be used in an emergency, such as a nuclear disaster or a terrorist attack. The letter from Governor Rendell to the Senate of the Commonwealth of Pennsylvania stated:

Nine months after I took office, I learned the state did not require emergency planning as a routine aspect of childcare licensure...Given that the legislation 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 providers from preparing such plans, I believe our legal authority to require these plans is maintained through regulation.

• **July 30, 2004** - In response to the meeting with Mr. King, Epstein and Christian receive a letter from PEMA Director David Sanko stating they consider the planning requirements for the preschool children to be the responsibility of the child care facility and parents.

Child care facilities are, for the most part, private business entities who, in conjunction with the parents, should assume responsibility for the safety of their charges. Local government will not treat these businesses any differently than it does any other citizen. Especially in rural areas, municipal government simply may not have the resources to provide shelter.

Mr. Sanko's letter should have prompted the NRC to start the 120 day clock at Three Mile Island.

• **August 2004** - Christian and Epstein, after numerous failed attempts to work with Governor Rendell's Special Assistant, draft letters to the NRC and Pennsylvania officials informing them that **Pennsylvania is in violation of federal law**. The Commonwealth was also informed that **nursing homes, group homes for the physically and mentally challenged and correctional facilities** are to be included in the Response Plans.

• **September 2004** - Epstein and Christian submit their concerns to the NRC and FEMA. **Congressman Todd Platts' requests a congressional investigation.**

Further evidence can be provided by Congressman Todd Platt's Office which has received many "Request for Assistance with Radiological Emergency Planning" sheets from numerous childcare facilities representing thousands of Pennsylvania preschool children. These Requests provide **evidence** that most child care facilities in the TMI-area are currently without radiological emergency planning.

• **December 15, 2004:** The Trust for America's Health, a nonprofit organization headed by former Senator Lowell P. Weicker, Jr. concluded that most states, including Pennsylvania did not have basic bio-terrorism measures in place. "More than three years after 9-11 and the anthrax tragedies, we've only made baby steps toward better bio-terrorism preparedness, rather than giant leaps required to adequately protect the American people" (www.tfah.org)

The Pennsylvania Department of Health did not dispute the Report's findings (Also refer to related development on August 25, 2006.)

• **March 2005:** The EFMR Monitoring Group, Inc. released the results of a survey of 74 for-profit and not-for-profit day-cares sites located within ten miles of Three Mile Island. Several disturbing trends surfaced as a result of the Survey:

- *The state does not review plans or coordinate transportation.*
- *Few state and local entities provide for or coordinate transportation.*
- *In some instances, transportation for children is only available after other populations have been moved.*
- *Many facilities assume they can evacuate to the same locations as public schools and presume those schools will provide transportation.*
- *Many facilities depend on the phone book for planning.*
- *Frequent expressions of exasperation and frustration included: "Who do we contact?", "Where do we go?", and "How do we get there?"*
- *Several facilities were unaware that they were within the ten mile zone.*
- *Numerous sites were confused by the separate regulations the Rendell administration promulgated in 2003 requiring all facilities to have an emergency plan in place by July 1, 2004. Senate Bill 922 passed in July 2004 exempting non profits from compliance.*

• **August 4, 2005** - FEMA's report on the Three Mile Island Radiological Emergency Preparedness Drill Report which **shows no centers were required to participate and/or demonstrate compliance with the above sited regulations.** (See President Bush disaster relief authorization of June 30, 2006 for proof of evidence).

• **August 29, 2005** - Hurricane Katrina, a Category 4 storm , makes landfall near Buras, Louisiana, at 6:10 a.m. CT (7:10 a.m. ET). President Bush makes emergency disaster declarations for Louisiana and Mississippi.

• **September 29, 2005** - Nuclear Regulatory Commission (NRC) Senior Nuclear Engineer Michael Jamgochian's Differing Professional Opinion (DPO), concluded that the criteria in Federal Emergency Management Agency's GM EV-2 "must be codified into the NRC's emergency planning regulations in order to permit the NRC to make a finding that there is reasonable assurance that protective measures can and will be taken." (p. 1, Block #10).

Mr. Jamgochian's DPO indicates that "the consequences of not codifying the state and local government's specific responsibilities for day-care and nursery school children is that these children in **Pennsylvania will not have pre planned evacuation capabilities in the event of an emergency.** Therefore, the **NRC would not be able to find that there is a reasonable assurance that protective measures can and will be taken in the event of an emergency.**" (p. 2, Block #11.) (**Boldface type added.**)

Mr. Jamgochian sites relevant NRC regulations, and lists direct evidence sent to the NRC that led him to these conclusions.

• **October 19, 2005** - Mr. Epstein's submitted a Petition for Rulemaking - "Codify GM EV-2 Into the NRC's Emergency Planning Regulations," and stated: (See March 15, 2006 for action taken due tot he NRC's failure to act on the Petition.)

“Based on the conclusions and evidence cited in Mr. Jamgochian’s DPO, I submit this new petition for rule making which seeks to codify FEMA’s 1986 Guidance Memorandum EV-2 “Protective Actions for School Children” into NRC’s emergency planning regulations.”

- **November 18, 2005** - Epstein filed a 2.206 Petition with Luis Reyes, NRC, Executive Director for Operations, and William Kane, NRC, Deputy Executive Director for Reactor Preparedness. Specifically, the Petition requested that the Nuclear Regulatory Commission,

issue a demand for information (DFI) to Amergen, the licensee for Three Mile Island Nuclear Station (TMI), Unit 1, and Exelon Generating Company (Exelon), the licensee for Peach Bottom Atomic Power Station (Peach Bottom), Units 2 and 3. You requested that the licensees be required to provide the NRC with information that establishes that they are in compliance with NRC regulations related to emergency planning and specifically the ability to implement protective measures for childcare facilities within the Emergency Planning Zones (EPZs) established around the TMI and Peach Bottom facilities. In addition, the petition requested that the NRC defer approving transfers of the licenses for the TMI and Peach Bottom facilities until the issues raised in the petition are resolved.

- **December 21, 2005** - The NRC convened a teleconference with **DHS, FEMA**, NRC national, regional and station representatives, Exelon and AmerGen, the Petition Review Board (PRB) and Eric Epstein to discuss if the 2.206 Petition filed on November 18, 2005 meets the criteria for consideration under 10 CFR 2.206.

- **December 21, 2005**: Mr. Christian and Mr. Epstein file a Formal Allegation with the U.S. Nuclear Regulatory Commission. The Allegation contends that the licensees operating “in the Commonwealth of Pennsylvania are in violation of federal regulations (10 CFR 50.47; 10 CFR 50.54; 10 CFR Part 50 Appendix E; 44 CFR 350) because Pennsylvania has improperly planned for and/or left out special populations (day-care centers and nursery schools) from their Radiological Emergency Response Planning (RERP) Requirements.”

• **January 20, 2006** - Mr. Christian and Mr. Epstein meet with **Governor Rendell**, and representatives from the Departments of DHS, PEMA, Education and Welfare. Mr. Epstein and Mr. Christian presented the Governor with a summary and a formal request:

It's the state and local governments' responsibility to provide radiological emergency support services to all day care centers and nursery schools who have more than 10 children and are located within 10-mile Emergency Planning Zones.

The Commonwealth continues to place preschoolers at risk of a major catastrophe by refusing to provide these emergency services; and in doing so is in violation of NRC licensing regulations as established by Presidential Executive Order 12148.

We seek a commitment and tangible proof from your office that the Commonwealth will fix these violations immediately.

The Governor committed to work with Mr. Christian and Mr. Epstein, failed to follow-up, but his data request for additional information was addressed by Mr. Epstein on January 23, 2006. Mr. Epstein also responded to Mr. Rendell's Deputy Chief of Staff, Arthur Stephen's request, for a settlement proposal. Mr. Epstein is still awaiting a response to his March 15, 2006 proposal.

• **March 10, 2006** - The NRC denied Mr. Epstein's 2.206 Petition and Demand for Information filed on November 18, 2005.

...As stated in your petition, the NRC can, under certain circumstances, order licensees to take action, including ceasing operations, if it is determined that the emergency preparedness of offsite response organizations does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. **DHS has not withdrawn its approval of the subject offsite plans and the NRC has not invoked the provisions of 10 CFR 50.54(s). This is not an issue of the licensee's compliance** with NRC regulations, but whether offsite response organizations are maintaining a state of emergency preparedness that provides a reasonable assurance that protective measures can and will be taken in the event of a radiological emergency...

The questions about the evacuation of child care facilities are currently being considered by the NRC, DHS, and the appropriate offsite response organizations as a result of your inquiries, other activities within Pennsylvania (e.g., legislation related to licensing childcare facilities), the Commission's directions to the NRC staff associated with the denial of the petition for rule making, and the DPO filed by a member of the NRC staff.

(Bold face type added)

• **March 15, 2006** - Mr. Epstein had to re submit the Petition for Rulemaking - Codify GM EV-2 Into the NRC's Emergency Planning Regulations initially filed on October 19, 2005.

I am refilling the Petition almost **six months after** the initial filing was submitted for Rulemaking.

The NRC has actively engaged in a coordinated effort to ignore this Petition. This systematic effort to loose a Petition for Rulemaking violates the Agency's statutory requirements under the Atomic Energy Act of 1954 which requires and encourages public participation in the oversight and rule making process. Moreover, explicit instructions for public participation are clearly enumerated under "Atomic Energy", *Federal Procedural Forms*, Sections §6:1 to §6:156.

The NRC reported, "**It [the Petition] has fallen into a black hole...**(January 24, 2006)..." Two days later, "**It's lost in the system kind of an answer...**Um, but its, but I shouldn't have overstated that **it fell through the cracks**. It hasn't done that. But they're kind of struggling to find where it fits into the process, um. We'll be getting back to you in a short time (January 25, 2006). (Telephone transcripts and conversations with Mr. William D. Reckley and Michael T. Leaser, U.S. NRC.)

• **April 3, 2006** - The NRC rejected Allegation filed by Christian and Epstein NSIR-2005-A-0011, **but fails to provide evidence** to support denial.

• **April 11, 2006** - Epstein and Christian disputed NRC's April 3, 2006 letter of rejection to Allegation NSIR-2005-A-0011.

In our allegation we provided creditable evidence that preschool children located near Pennsylvania's nuclear power facilities were not being provided emergency provisions to assure their safety in the event of a radiological emergency. Your response failed to provide any evidence that preschool children are planned for in the event of a nuclear emergency; and was in complete contrast to the NRC's reasons published for denying petition (PRM 50-79) to codify new emergency planning requirements for preschool children.

• **May-June 2006** - The Commonwealth of Pennsylvania reported a \$260 million surplus, and the owners of Three Mile Island and Peach Bottom continue to submit voluminous documentation before the Pennsylvania PUC, the Nuclear Regulatory Commission, and the Security and Exchange Commission relating to the corporation's robust financial health.

The Commission directed the NRC staff to consider Mr. Epstein's contentions and supplemental filing dated October 7, 2005, as if they were "written comments" under 10 CFR 2.1305. The written comments have been considered by the NRC staff in connection with the issuance of this Order. (15)

• **June 5, 2006** - The NRC approves the License Transfer at Peach Bottom despite overwhelming evidence and testimony presented that the plant is in violation of its current operating licenses.

• **June 21, 2006**- Pursuant to FEMA Rule 44 of the Code of Federal Regulations Part 350 Review, Eric Joseph Epstein Delivered A Formal Advisory Notification Demonstrating that the Commonwealth of Pennsylvania's 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 "no longer adequate to protect public health and safety by providing reasonable assurance..."

The Federal Emergency Management Agency is charged with the oversight of offsite emergency planning around nuclear plants. These violations necessitate that the Agency instantly activate FEMA Rule 44 of the Code of Federal Regulations Part 350.13.

The Notification requested that FEMA must Order the Nuclear Regulatory Commission (NRC) to take the required enforcement actions in accordance with 10 CFR 50.54(s)(2)(ii) to insure that protective provisions are in place for day-care centers and nursery schools located within ten (10) miles of the Three Mile Island Nuclear Generating Station and the Peach Bottom Atomic Power Station.

• **June 30, 2006** - The DHS-FEMA required the Commonwealth of Pennsylvania to **submit evidence** as a condition for disaster relief as a result of widespread flooding. President Bush authorized assistance after the federal government reviewed the evidence “for the Commonwealth of Pennsylvania due to damage resulting from severe storms, flooding, and mudslides beginning on June 23, 2006, and continuing.”

Please refer to FEMA’s report on the Three Mile Island Radiological Emergency Preparedness Drill Report on August 4, 2005 for a **document that requires “no evidence” to support a false finding.**

• **July 5, 2006** - M. T. Lesar, NRC, Chief Rules and Directives Branch, e-mailed Mr. Epstein and stated, “The staff is continuing its examination of the issues raised by your petition. Staff recommendations will probably be presented to the Commission for approval.” The Petition, originally filed **October 19, 2005**, sat in a drawer and was refiled on **March 15, 2006**. The Petition has yet to be posted on ADAMS...

• **August, 2006** - *Protecting the Homeland 2006/2007* was released by the Brookings Institution. The report concluded,

...while many measures taken thus far have been designed to prevent a recurrence of a similar strike, much less has been done to thwart other plausible kinds of attacks. Brookings experts argue that the future efforts should focus on stopping catastrophic threats such as hits on chemical plants and other private-sector infrastructure, large- scale effects from biological pathogens, **radiological or nuclear attacks**, and (when the technology is ready) surface-to-air missiles—and should emphasize early prevention rather than later response” (18) (**Boldface type added.**) (Refer to December 15, 2004, for a related incident.)

On November 20- 2006 - 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.

In responds to your correspondence submitted to the GAO FraudNet questioning why child care facilities, nursery schools and daycare centers around nuclear plants are not currently required to be apart of any radiological incident or evacuation plan. We have assigned control number 48407 to this matter and request that it be used in any future correspondence with this office.

We reviewed your information and found that the situation you describe is not within the scope of any GAO work. Therefore, in accordance with GAO FraudNet policy to forward instances of suspected wrongdoing to executive agencies for appropriate action, we referred your concerns to the Department of Homeland Security, Office of the Inspector General (DHS/OIG), for their review and whatever action they deem appropriate.