UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	**)**
	) Docket No. 50-039
PPL Bell Bend, LLC.	**)**
(Bell Bend Nuclear Power Plant)	

Eric Joseph Epstein's Reply to Applicant's Answers and the Nuclear Regulatory Commission Staff's Answer to Eric Joseph Epstein Petition for Leave to Intervene, Request for Hearing, and Contentions with Supporting Factual Data Re: PPL Bell Bend LLC: Combined License Application for the Bell Bend Nuclear Power Plant Docket No. 52-039; NRC-2009-0112 Adams Accession No. ML082140630

Eric Joseph Epstein, *Pro se*
4100 Hillsdale Road
Harrisburg, PA 17112
(717)-541-1101
lechambon@comcast.net

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cc: See attached Certificate of Service

I. Introduction.

Eric Joseph Epstein ("Mr. Epstein" or "Epstein"), pursuant to 10 C.F.R. § 2.309 (d) and (e), Petitioned for Leave to Intervene, Request for Hearing, and Contentions, Re: PPL Bell Bend LLC, Combined License Application for the Bell Bend Nuclear Power Plant Docket No. 52-039. (NRC-2009-0112, Adams Accession No. ML082140630) on May 18, 2009.

Mr. Epstein requested 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 four (4) admissible contentions.

Pursuant to 10 C.F.R. § 2.309, "Hearing requests, petitions to intervene, requirements for standing, and contentions. (2) Except in a proceeding under 10 CFR 52.103, the requestor/petitioner may file a reply to any answer. The reply must be filed within seven days after service of that answer. " Mr. Epstein is filing a **Reply to Applicant's Answers to the Nuclear Regulatory Commission Staff's Answer to Eric Joseph Epstein Petition for Leave to Intervene, Request for Hearing, and Contentions with Supporting Factual Data Re: PPL Bell Bend LLC: Combined License Application for the Bell Bend Nuclear Power Plant Docket No. 52-039; NRC-2009-0112 Adams Accession No. ML082140630.**

II. History of Proceeding.

PPL Bell Bend, LLC ("PPL" or "the Applicant") submitted a Combined License Application for the Bell Bend Nuclear Power Plant ("BBNPP" or "Bell Bend") on October 13, 2008.

October 29, 2008, the Nuclear Regulatory Commission ("NRC" or "the Commission") has made available to the public the combined license application for a new reactor at the Bell Bend site near Berwick, Pennsylvania and west of the Susquehanna Steam Electric Station ("SSES").

On December 22, 2008 the Nuclear Regulatory Commission accepted PPL Bell Bend LLC, (1) Combined License Application ("COL" or "COLA") for an Evolutionary Power Reactor ("EPR") at the Bell Bend Nuclear Power Plant Docket No. 52-039.

PPL Bell Bend is seeking approval to build and operate an EPR at the site, approximately seven miles northeast of Berwick. The EPR is an Areva-designed pressurized water reactor, with a nominal output of approximately 1,600 megawatts of electricity.

March 18, 2009, the NRC announced the opportunity for public participation in a hearing on a Combined License application for a new reactor at the Bell Bend site near Berwick. The site is adjacent to the existing two-reactor Susquehanna Steam Electric Station.

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1 **PPL Bell Bend, LLC's** parent is **PPL Energy Supply, LLC**, which will provide the parent financial guarantee method adopted by PPL Bell Bend, LLC, consistent with the requirements of 10 CFR 50.75(e) (iii)(B) (CFR,2007). PPL Energy Supply will also provide an ultimate guarantee that decommissioning costs will be paid in the event the PPL Bell Bend is unable to meet its decommissioning obligations at the time of decommissioning. (BBNPP, 1-12, Rev. 1)

PPL Energy Supply LLC, is a subsidiary of PPL Energy Funding and the parent of PPL Generation, PPL Energy PLus , PPL Global and other subsidiaries.

PPL Energy Funding Corporation is a subsidiary of PPL and is the parent company of PPL Energy Supply.

PPL is the parent holding company of PPL Electric, PPL Energy Funding and other subsidiaries.

PPL Electric is a **regulated utility** subsidiary of PPL that transmits and distributes electricity in its service territory and supplies electric to retail customers in this territory as a Provider of Least Resort ("PLR"), (PPL 2008 Annual Report, p. i.).

PPL Bell Bend submitted the COL application and associated information on October 10, 2008, seeking approval to build and operate an Evolutionary Power Reactor at the site, approximately six miles northeast of Berwick. The NRC is currently reviewing the EPR for possible certification.

The NRC staff has determined that the application contains sufficient information for the agency to formally "docket," or file, the application and begin its technical review. Docketing the application does not preclude additional requests for information as the review proceeds; nor does it indicate whether the Commission will issue the license. The docket number established for this application is 52-039.

Pursuant to the Secretary of the Nuclear Regulatory Commission, Annette L. Vietti-Cook's, "Nuclear Regulatory Commission, PPL Bell Bend, LLC Combined Operating License Application for the Bell Bend Nuclear Power Plant , Docket No. 52-039, Notice of Hearing, Opportunity To Petition for Leave to Intervene, and Associated Order," (NRC-2009-0112; Adams Accession No. ML082140630), Mr. Epstein requested a digital ID certificate and the creation of an electronic docket for this Proceeding on May 4, 2009. Mr. Epstein's request for a digital ID was approved on May 7, 2009.

The NRC issued, in the Federal Register, a notice of opportunity to intervene in the proceeding on the application. The deadline for requesting a hearing was established as May 18, 2009, 11: 59 p.m. "To be timely, filings must be submitted no later than 11:59 p.m. Eastern Time on the due date." Petitions may be filed by anyone whose interest may be affected by the proposed license, who wishes to participate as a party in the proceeding, and who meets criteria set out in the NRC's regulations.

Eric Joseph Epstein, pursuant to 10 C.F.R. § 2.309 (d) and (e), Petitioned for Leave to Intervene, Request for Hearing, and Contentions with Supporting Factual Data Re: PPL Bell Bend LLC, Combined License Application for the Bell Bend Nuclear Power Plant Docket No. 52-039. (NRC-2009-0112), Adams Accession No. ML082140630). Mr. Epstein also requested 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, submitted four (4) contentions which be deemed admissible.

On June 12, 2009, the Applicant and the Nuclear Regulatory Commission Staff filed Answers to Eric Joseph Epstein Petition for Leave to Intervene, Request for Hearing, and Contentions with Supporting Factual Data Re: PPL Bell Bend LLC.

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 the NRC's official posting: "The NRC has issued in the Federal Register a notice of opportunity to intervene in the proceeding on the application, and the deadline for requesting a hearing is May 18. Petitions may be filed by anyone whose interest may be affected by the proposed license, who wishes to participate as a party in the proceeding, and who meets criteria set out in the NRC's regulations." (NRC Announces Opportunity to Participate in Hearing On New reactor Application for Bell Bend Site," No. 09-051, March 18, 2009.)

IV. Discussion.

PPL and the NRC staff have embarked on a paradoxical legal journey whereby they ignore precedent and case law when disputing Mr. Epstein's standing, yet seek to restrict and redefine the criteria for contentions when arguing against the admissibility of Mr. Epstein's contentions.

In addition, Staff's Answers re-argue contentions admitted by standing Atomic Safety and Licensing Board Panels, in recent pleadings.

PPL and the NRC staff create syntactical arguments based on subjective and fluid definitions of "intent," "demonstrate," "viability," "reasonable assurance," "domination and control," "speculation," "imprecise readings," "inchoate discussions," "premature processes," and the catchall defense of dismissing any criticism of the COLA as a de facto "collateral attack" on all things nuclear.

The result is a legal construct in which nuclear law is not an object to be known scientifically, but a self-generated reality to be passively encountered and obeyed.

Moreover, any notion of insufficient data provided by Mr. Epstein can be extinguished by referring to the direct references and citations contained in Mr. Epstein's Petition.

Mr. Epstein is an historian and undisputed expert witness on decommissioning, nuclear economics and radioactive waste isolation who has testified before the Pennsylvania Public Utility Commission. Enclosed please find Mr. Epstein's biography. His vitae is available upon request.

V. A. Mr. Epstein Has Established Standing In This Proceeding.

At pp. 20-24 of its Answer, PPL alleges that Mr. Epstein has failed to establish standing. PPL first argues that Mr. Epstein cannot rely upon the "proximity presumption" because he "has failed to establish sufficient contacts to the area to establish standing" (PPL Answer, p. 21) and further argues that simply piercing the 50-mile radius is not sufficient to establish the requisite "bond" between Mr. Epstein and the proposed reactor. (PPL Answer, p. 22) Moreover, PPL argues that where the Petitioner claims standing based on visits in the vicinity of the facility, his standing depends on the traditional standing doctrine in accordance with the NRC's ruling in Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 322-325 (1999). In addition, the NRC Staff argues that Mr. Epstein should be denied standing based largely upon the fact that he fails to discuss how long his visits within the 50-mile radius of the proposed reactor typically last. (NRC Staff Answer, pp. 8-9)

NRC case law has established a proximity presumption whereby an individual may satisfy the standing requirements by demonstrating that his or her residence is within the geographical area that might be affected by an accidental release of fission products and in proceedings involving nuclear power plants this area has been defined as being within a 50-mile radius of such a plant. Florida Power & Light Company (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325 (1989); Virginia Electric and Power Company (North Anna Nuclear Power Station, Units 1 & 2), ALAB-522, 9 NRC 54, 56 (1979) ("close proximity [to a facility] has always been deemed enough, standing alone, to establish the requisite interest" to confer standing).

Mr. Epstein established standing during the relicensing of the Susquehanna Steam Electric Station. (PPL Susquehanna, LLC, Susquehanna Steam Electric Station Units 1 and 2, Docket Nos. 50-387-LR & 50-388-LR; ASLBP No. 07-851-01-LR.) The NRC Atomic Safety and Licensing Board Panel's (ASLBP") Memorandum and Order stated:

> "We do, however find that the petitioner Epstein has made a sufficient showing to establish standing for himself under the 'proximity presumption.' Mr. Epstein admits that he resides more than 50 miles from he plant. However, significant contacts with an affected area can be sufficient to establish standing, (even) when full-time residence within the 50 mile radius is not shown. While not all intermittent contacts are sufficient to establish standing, the regularity of Mr. Epstein's trips to the area around the plant, for a number of years, weigh in his favor. In addition he resides six miles outside the area in question and therefore can be expected to continue conduct business there in the future. Because of this pattern of regular contacts with the 50-mile radius around the plant, we find that Mr. Epstein has standing on his own behalf." (1)

Further, significant contacts with an affected area can be sufficient to establish standing, even when full-time residence within the 50-mile zone is not shown. Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NEC 318, 323-325 (1999) (frequent recreational use of a specific parcel of land is sufficient to establish standing); Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 31-32 (1998) (frequent, extended visits to relatives sufficient to establish standing); Georgia Power Company (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 35 (1993) (residence in a location one week per month is sufficient to establish standing).

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1 US Nuclear Regulatory Commission, Atomic Safety and Licensing Panel, Before Administrative Judges: Ann Marshall Young, Chair; Dr. Kaye. D. Lathrop; and, Dr. William W. Sager, PPL Susquehanna, LLC, Susquehanna Steam Electric Station Units 1 and 2, Docket Nos. 50-387-LR & 50-388-LR; ASLBP No. 07-851-01-LR, In the Matter of PPL Susquehanna, LLC, Susquehanna Steam Electric Station Units 1 and 2, Docket Nos. 50-387-LR & 50-388-LR; ASLBP No. 07-851-01-LR, **Memorandum and Order**, pp. 10-11 (Ruling on the Standing and Contentions of Petitioner Eric Joseph Epstein).

In this regard, Mr. Epstein has demonstrated that he regularly pierces the 50-mile radius of the proposed Bell Bend reactor several times per month, and has over several years. (Epstein Petition to Intervene, pp. 7-9). (2)

For these reasons, PPL's alternative argument, that Mr. Epstein failed to demonstrate an injury-in-fact, causation and redressibility (PPL Answer, pp. 22-23) and the NRC Staff's argument concerning the length of each visit, should be rejected. (3)

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2 The Sustainable Energy Fund and Green Connexions' business activities are a matter of public record as Mr. Epstein noted in his Petition, pp. 7-9. Neither the Applicant or the NRC can stage ignorance as to the nature and duration of Mr. Epstein business trips which were explicitly described to the NRC and PPL at the Before the Atomic Safety and Licensing Board, In the Matter of PPL Susquehanna, LLC Susquehanna Steam Electric Station, Units 1 and 2, Docket Nos. 50-387-LR 50-388-LR, ASLBP, Eric Joseph Epstein's Response to the Atomic Safety & Licensing Board Panel's Request for Information, March 11, 2007:

> Mr. Epstein routinely pierces the 50-mile proximate rule during his day-to day-actives simply by traveling to Lebanon, Schuylkill and Upper Dauphin counties. As noted during the teleconference, Mr. Epstein is a member of the Board of Directors of the Sustainable Energy Fund of Central Eastern Pennsylvania since its inception in 1999. He also has been a director of GreenConnexions, Inc. since 2006 which is based in the same office. Both entities have a 29 county constituency that mimics PPL's residential customer base.
>
> His commute to the office in Allentown, and meetings at offsite locations, must necessarily pierce the 50-mile proximity zone for substantial periods of time. Mr. Epstein's meeting schedule, as of March 9, 2007, was only available from April through June 2007, and includes business meetings in Allentown, Fogelsville, and Hazleton on the following days and evenings: April 10, 12, 16, 26 and 27; May 10, 15, 17 and 30; June 5, 6, 12, 19, 21, 26 and 28.

3 In addition, employees of the Applicant and NRC attended meetings with Mr. Epstein within seven miles of the proposed BBNPP site on several occasions last year including but not limited to NRC meetings at the Susquehanna Energy Information Center in Berwick, on May 19, 2009; the Eagles Building in Berwick on February 3, 2009; and, the Eagles Building in Berwick on May 28, 2008.

In fact, PPL has proposed a radical, unnecessary and self-serving change to the NRC's long-standing proximity presumption for standing in nuclear reactor licensing proceedings. PPL proposes to overturn decades of precedent in NRC licensing cases that encourages public participation and provides standing for members of the public within a limited distance of a proposed nuclear reactor, in support, rather, of a concept that sets standing hurdles so high that it is unlikely any member of the public could achieve standing in a reactor licensing case.

PPL's underlying premise is based upon an unsupportable presumption: that PPL's proposed Bell Bend nuclear reactor is so safe that no potential hazard to people living within the NRC's traditionally-defined 50-mile radius or just outside of the radius exists and no contentions can be justified. If this presumption were accepted, it would be, for all practical purposes, nearly impossible for any intervening individual at any reactor site to ever gain standing in a COL proceeding.

Moreover, such a presumption would be squarely in opposition to the intent of the NRC's regulations, 10 CFR 52, and does not represent a reasonable construction of Section 189a of the Atomic Energy Act, nor does it conform to the various NRC safety-related regulations.

Ironically, although PPL challenges Mr. Epstein at every turn for allegedly impermissibly waging collateral attacks on the NRC's regulations (PPL Answer, p. 42), PPL itself has proposed that the NRC ignore years of standing precedent (and NRC regulations) by ruling in its favor as to Mr. Epstein's standing. Such broad challenges, as PPL has argued, should be rejected. Calvert Cliffs 3 Nuclear Project et al (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-04, ___ NRC ___ (slip op. at 36) (March 24, 2009).

B. Eric Epstein's Contention 1 Should Be Deemed Admissible.

Contention #1:

*PPL has stated in Part 1 of the General Information section of its Bell Bend COL Application that PPL Bell Bend, LLC will use a parent company guarantee from PPL Energy Supply, LLC to provide reasonable assurance of decommissioning funding as required by 10 CFR 50.75. Part 1: General Information 1.6.2. In addition, PPL Bell Bend has omitted damaging financial information that undermines the Company's ability to provide financial assurances: "The application fails to contain information on a relevant matter as required by law...and [provides] the supporting reasons for the petitioner's belief." For a contention of omission, the the petitioner's burden is only to show the facts necessary to establish that the application omits information that should have been includ*ed.

Mr. Epstein has stated in his Contention 1 that "Bell Bend's decommissioning funding assurance, in the form of a parent guarantee, is grossly inadequate to provide assurance that Bell Bend can provide "minimum certification amounts" or "assure sufficient funds will be available" at the time of decommissioning. (Epstein Petition, p. 41)

In response, PPL alleges that it must use the "prepayment method" for decommissioning funding and that 10 C.F.R. Section 50.75(b) requires that "each applicant for a combined license submit a decommissioning report that contains a certification that financial assurance for decommissioning will be provided using one or more of the methods described in Section 50.75(e). The authorized methods in Section 50.75(e) include prepayment..." (PPL Answer, p. 42) Consequently, PPL argues, Mr. Epstein's challenge to the use of a "prepayment method" is, in effect, an impermissible collateral attack on the NRC's regulations. Id. The NRC Staff makes a similar allegation. (NRC Staff Answer, pp. 18-21).

In fact, PPL has misrepresented the nature of Mr. Epstein's challenge. Actually, Mr. Epstein has argued that neither PPL Bell Bend nor PPL Energy Supply, not individually and not jointly, can guarantee adequate decommissioning funding will be in place based upon recent developments concerning the financial condition of other decommissioning funds managed by PPL- related companies and the mismanagement of the decommissioning funds for Susquehanna Units 1 and 2. (Epstein Petition, pp. 12-17) Thus, Mr. Epstein's challenge is not based upon PPL's use of a parent guarantee (which is an option clearly available under NRC regulations); instead, the challenge is to the substance of the parent guarantee that PPL has proffered. In short, Mr. Epstein has argued that PPL's parent guarantee is not viable. Certainly PPL is not arguing that it may present an illusory plan and that it must be accepted by the NRC because it may be defined as a parent guarantee.

The NRC Staff argues that the weaknesses in PPL's parent guarantee are not fatal because at this point in the process, PPL does not have to produce a financial instrument. (NRC Staff Answer, pp. 19-20). However, as discussed above, even at this early stage, PPL must demonstrate that its proposal is viable. Mr. Epstein has argued that it is not viable. (4)

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4 Mr. Epstein has been intimately involved in reviewing and evaluating decommissioning projections at the Pennsylvania Public Utility Commission relating to the Susquehanna Steam Electric Station 1 and 2, Limerick Nuclear Power Plant 1 and 2, the Peach Bottom Atomic Power Station 1, 2 and 3, and the Three Mile Island Nuclear Generation Station 1 and 2.

In fact, Mr. Epstein was the primary sponsor and author of PPL's current decommissioning rate recovery formula at the SSES that will end on December 31, 2009.

> "PP&L will recover its nuclear plant decommissioning costs through the CTC as an element of stranded cost recovery. The recovery will be calculated at the figure approved in the Commission's Order entered June 15, 1998, of $128.989 million on a net present value basis. Nothing herein shall be deemed to limit PP&L's ability to seek an exception to the rate cap for recovery of nuclear decommissioning expense pursuant to Section 2804(4)(iii)(F) of the Public Utility Code, 66 Pa. C.S. ss.2804(4)(iii)(F)." (PP&L Restructuring Settlement, D.1., p. 20).

Similarly, PPL argues that Mr. Epstein impermissibly challenges the current decommissioning funding amount provided in the application because the funding amount was calculated using the formula identified in the NRC regulations. (PPL Answer, pp. 42-43). However, for the reasons stated above, this argument should also be rejected. Mr. Epstein has challenged the viability of the decommissioning funding as represented by PPL. (5)

At p. 43 of its Answer, PPL alleges that Mr. Epstein's argument regarding recent downturns in the stock market raises an issue that is not material to the findings that must be made in this proceeding. PPL argues further that "[n]either market capitalization nor share price are variables used in the financial test for a parent guarantee set forth in the regulations..., nor are these values related to tangible net worth or the other financial parameters that are used in the test." *Id*. PPL also alleges that issues, raised by Mr. Epstein relating to the circumvention of record-keeping requirements and the use of escalation factors developed by PPL relating to Susquehanna Units are outside the scope of this proceeding or are immaterial. (PPL Answer, p. 44)

In fact, Mr. Epstein has argued that the continued downturn in financial markets has generally made obtaining new sources of bank and capital markets funding more difficult and costly. In addition, he has stated that the declines in the market price of debt and equity and securities resulted in the unrealized losses that have reduced asset values of PPL Energy Supply's investments in its nuclear decommissioning trust funds experienced negative investment returns during 2008. (Epstein Petition, p. 13, fn 8)

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5 PPL's 2009 minimum estimated share (90%) for closing each of its operating nuclear are grossly underfunded based on data reported to the NRC and fails to acknowledge that the Susquehanna steam electric Station will be out of the rate base and unable o recover additional deommissioning costs as of December 31, 2009: http://adamswebsearch2.nrc.gov/nrcws/nrcdoccontent.aspx?Library=PU_ADAMS^PBNTAD01&LogonID=3b3cf75748254b99130920d50d1b3f0e&DocID=091030266

PPL's allegation that Mr. Epstein's stock valuation argument lacks materiality is without basis and should be rejected. At this preliminary stage, Mr. Epstein does not have to submit admissible evidence to support his contention, rather he must simply "[p]rovide a brief explanation of the basis for the contention", 10 C.F.R. Section 2.309(f)(1)(ii), and "a concise statement of the alleged facts or expert opinions which support the ... petitioner's position." 10 C.F.R. Section 2.309(f)(1)(v). This rule ensures that "full adjudicatory hearings are triggered only by those able to proffer "... minimal factual and legal foundation in support of their contentions."

In the Matter of Duke Energy Corporation (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999). The Commission has further clarified that "an intervenor need not ... prove its case at the contention stage. The factual support necessary to show a genuine dispute exists need not be in affidavit or formal evidentiary form, or be of the quality necessary to withstand a summary disposition motion." In the Matter of Georgia Institute of Technology, CLI-95-12, 42 NRC 111, 118 (1995). Thus, the Commission has indicated that where petitioners make technically meritorious contentions based upon diligent research and supported by valid information and expert opinion, the question of materiality is satisfied.

Mr. Epstein has adequately supported his contention that the downturn in the financial markets has reduced the value of existing PPL decommissioning assets relating to its other nuclear reactors by citing to relevant annual reports submitted by PPL. (Epstein Petition, p. 13, fn 8) PPL has not challenged the accuracy of this statement.

As discussed above, having demonstrated that the contention is technically meritorious, Mr. Epstein must be given the opportunity (during the course of this proceeding) to demonstrate that a genuine dispute exists. Moreover, the fact that the PPL companies may be financially overextended is a relevant consideration at this stage of the proceeding. (6)

Mathematical calculations using inputs that are not based in reality are of no value to the NRC. (7) Consequently, Mr. Epstein has stated that such amounts should be excluded from the NRC's analysis.

Mr. Epstein's Contention 1 should be deemed admissible.

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6 PPL has demonstrated its inability to control and predict costs at Bell Bend. According to PPL, the Bell Bend project cost has risen from "about $10 billion" on September 30, 2008, to "as much as $15 billion" in **eight months** during a period of deflation (-.4%) in Pennsylvania. (U.S. Department of Labor's Consumer Price Index).

> Costing about $10 billion to develop, Bell Bend would take seven to eight years to construct and begin operating in 2016 or 2017, said PPL spokesman Dan McCarthy. (*Lancaster New Era*, Published: Sep 30, 2008).

Eight months later in May 2009, PPL Bell Bend's FAQ web site began reporting a much higher number. **How much would the plant cost?** "It is anticipated that the plant would cost as much as $15 billion, including escalation, financing costs, initial nuclear fuel, contingencies and reserves." http://www.bellbend.com/faqs.htm

7 Mr. Epstein is seeking to avoid a scenario similar to recent developments relating to the radioactive cleanup of the DuPage River, the cleanup of which has been delayed due to the Bankruptcy of Tronox, Inc. A $500 million effort to remove radioactive material along a waterway in western DuPage County, Illinois, was held up after Tronox filed for bankruptcy on January 12, 2009.

Cleanup of the West Branch of the DuPage River began in 2004 and was expected to finish in 2011, purging the West Chicago area of radioactive residue from a factory that closed in 1973. The factory was owned by Kerr-McGee which used thorium to make gaslight mantles. Some of the material washed down storm drains into Kress Creek, which feeds the DuPage.

The Applicant's proposed Bell Bend plant would be located in the middle of the Susquehanna River, which empties into the Chesapeake Bay after passing through the Susquehanna River Basin.

C. Eric Epstein's Contention 2 Should Be Deemed Admissible.

Contention #2:

The Application to build and operate Bell Bend violated the National Environmental Policy Act ("NEPA") and NRC COLA guidelines by failing to demonstrate that the site has the capability to store Class B and C low level radioactive waste ("LLRW") during the entire operating life of the plant and beyond in the event Barnwell remains closed to PPL, Clive, Utah operated by Energy Solutions "no longer becomes cost effective," (8) *or no other waste disposal options are developed or available.*

At page 45 of its Answer, PPL alleges that Mr. Epstein "mistakenly asserts that the ER does not address low level waste management in the absence of licensed disposal facilities." In fact, Mr. Epstein argues that the ER "is deficient in discussing its plans for management of Class B and C wastes. In light of the current lack of a licensed offsite disposal facility, and the uncertainty of whether a new disposal facility will become available during the license term, the ER must either describe how Applicant will store Class B and C wastes onsite and the environmental consequences of extended onsite storage by transferring its Class B and C wastes to another facility for storage of LLRW." (Epstein Petition, p. 20)

Thus, Mr. Epstein did not allege that the ER failed to address low level waste management at all (as PPL asserts) but that PPL had inadequately addressed the subject. PPL also asserts that Mr. Epstein "has provided no information to call into question the adequacy of the discussion in the ER." PPL Answer, p. 45.

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8 PPL's 10-K acknowledged, "The Barnwell facility stopped receiving most wastes, including Pennsylvania in June 2008. PPL will send most of its low-level radioactive waste to the Clive Utah facility and the remainder will be stored at the Susquehanna storage facility. **In the event the Clive site closes or other emergent disposal options become unavailable or are no longer cost effective, low level radioactive waste will be stored onsite at Susquehanna…PPL Susquehanna cannot predict the future available of disposal at such facilities**." (**Boldface type added**)

However, Mr. Epstein states at page 21 of his Petition that the details of how Bell Bend will safely dispose of LLRW or safely store on site "have been omitted or not sufficiently presented in Bell Bend's Application ([PPL Bell Bend] Application, ER, Rev. 3.5 Radwaste Systems and Source Terms, 3.8 Transportation of Radioactive Materials, 5.9 Decommissioning, and 5.11 Transportation of Radioactive Materials.)" (Epstein Petition, p. 21)

Staff takes a faith-based approach to low-level radioactive waste isolation despite the fact that Barnwell closed in June 2008, and PPL confessed that Clive may be an uneconomical option. Acknowledging the absence of a waste disposal option does not constitute a suitable alternative.

The NRC staff simply accepts PPL's "discussion" and "general description" as a "could be" remedy.

> The ER further states that "[i]n the event no offsite disposal facility is available to accept Class B and C waste from BBNPP when it commences operation, additional waste minimization measures would be implemented to reduce or eliminate the generation of Class B and Class C waste. *Id.* The ER states that these measures could extend capacity in the Radioactive Waste Storage Capacity Buildings to over 10 years [assuming there are no uprates], which would provide ample time for offsite disposal capacity to be developed or additional onsite capacity to be added." (NRC Staff Answer, p.23)

The Applicant's plan to store waste relies on vague commentary and unsubstantiated assurances, and is further undermined by PPL's far-fetched notion that they can "eliminate the generation of Class B and C waste." There is no timeline applied to PPL assertion that "ample time" exists to develop, let alone construct, site and operate facility. There is no "waste confidence rule" for LLRW isolation, and the Commission has explicitly stated that "storage is no substitute for disposal."

Accordingly, PPL and the NRC's allegations of non-design or site specific support by Mr. Epstein, should be rejected, and Mr. Epstein's Contention 2 should be deemed admissible.

E. Eric Epstein's Contention 3 Should Be Deemed Admissible.

The Atomic Energy Act prohibits foreign ownership, control or domination of a nuclear power plant (42 U.S.C. Section 2133(d)). The NRC's Final Standard Review Plan on Foreign Ownership, Control, or Domination (August 31, 1999) also prohibits the issuance of a power reactor license to an Applicant if the Commission knows or has reason to believe that the Applicant is an alien or is owned, controlled, or dominated by an alien or by a foreign corporation or foreign government.

At pages 47-48 of its Answer PPL asserts that Mr. Epstein's contention concerning foreign ownership "fails to raise any colorable argument that would suggest even a modicum of foreign ownership in or control of Bell Bend. According to the COL Application, the sole applicant for the Bell Bend Nuclear Power Plant is PPL Bell Bend, LLC. (General Information at 1-1.)

Although Mr. Epstein acknowledges that the Application states that PPL Bell Bend, LLC is the sole applicant for the license, as Mr. Epstein argues at pages 24-25 of his Petition, the Atomic Energy Act, 42 U.S.C. Section 2133 (d) provides that "[n]o license may be issued to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled or dominated by an alien, a foreign corporation, or a foreign government."

PPL has consistently stated that it will proceed with a new reactor "only in a joint venture arrangement" (*Nuclear News*, July 2007, p. 17) and that it "would not proceed to construction absent a joint arrangement with other interested parties..." ("PPL 2008 Annual Report," Development, p. 148. PPL has stated that it will use Unistar Nuclear as a contractor/participant (Safety Analysis Report, Chapter 1, 1.4.2).

Unistar Nuclear is owned 50% by Constellation Energy and 50% by the French company Electricite de France, which is 84.85% owned by the government of France. EDF and Constellation plans to build three new reactors in the U.S. at Calvert Cliffs in Maryland, Nine Mile Point in New York, Bell Bend in Pennsylvania.

Staff essentially parrots the Applicant's argument, and alleges that Mr. Epstein's "imprecise reading of the Application, the US FSAR, or any other document does not generate an issue suitable for litigation in this licensing process." (NRC Staff Answer, p. 34) Staff dismisses Mr. Epstein's argument as, "Speculation about future partnerships or joint ventures the Applicant may or may not become involved in is neither required or appropriate in this proceeding." (NRC Staff Answer, p. 36).

Both the Applicant and staff ignore the facts on the ground. Since deregulation, traditional Pennsylvania utilities were reorganized as integrated horizontal corporations. These companies are actually operating at a competitive disadvantage when matched against the resources of national and vertically integrated multinational corporations. (9)

Staff and Applicant seek to postpone a foreign ownership discussion for an indefinite period of time at an undisclosed venue. Yet PPL and Pennsylvania utilities continue to consolidate and cement foreign affiliations. (10)

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9 In 2007, Duquesne Light Holdings was acquired by an Australian consortium led by Macquarie Infrastructure Partners and Diversified Utility and Energy Trusts. "In a consolidating electric utility industry, this partnership with the Macquarie Consortium gives Duquesne Light the best opportunity to maintain our role as a committed, Pittsburgh-based public service provider, a key employer and a long-time community partner in the region while delivering an attractive cash premium to our shareholders," said Morgan K. O'Brien, president and chief executive officer of Duquesne Light. (PITTSBURGH, Dec. 5, 2006 /PRNewswire-FirstCall/).

10 In 2007, the United Water of Pennsylvania's parent - Suez and Gaz de France -merged with United Water Pennsylvania Inc. ("UWPA"). Based in Paris, France, Suez is one of the oldest multinational corporations in the world. The company's primary operations include water, electricity and natural gas supply, and waste management. Gaz de France is also a French-based company, primarily involved in the supply and distribution of natural gas. UWPA provides water service to approximately 175,000 people through 39 municipalities in nine Pennsylvania counties. (*Connection*, Utility News in Pennsylvania, PA PUC Autumn 2006).

PPL has established storing ties to Community Energy, Inc. CEI is a wholly owned subsidiary of Spanish energy giant Iberdrola. CEI developed and jointly owns the Jersey-Atlantic Wind Farm and the Bear Creek Wind Farm (with PPL), and has recently contracted to provide an Alternative Energy Program for PPL Electric. (Pa PUC, June 2009, Docket. No. P-2008-2021398).

At the same time, Iberdrola has become the latest European company to signal its interest in new nuclear building programs, and joined forces with Scottish and Southern Energy to secure potential sites for new nuclear reactors in the United Kingdom.

Mr. Epstein recognizes that PPL has not identified Unistar Nuclear as a potential partner on the Bell Bend project, but the Applicant has expressed a strong desire to partner and "attract additional investors." (11) Mr. Epstein raises this issue because PPL Bell Bend, LLC may decide to partner with a foreign-owned entity on this project.

Since PPL is not legally required at this stage to identify with whom it might partner in the future on this project, Mr. Epstein has legitimately raised the issue of foreign ownership. Of course, in order to remove all doubt, PPL could have argued in its Answer that it will under no circumstances partner with another entity in an arrangement that could lead to ownership or control by a foreign entity.

However, PPL has failed to do so. Given the identified circumstances, Mr. Epstein has raised a technically meritorious contention. See, In the Matter of Georgia Institute of Technology, CLI-95-12, 42 NRC 111, 118 (9195).

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11 *Inside Susquehanna: NewS for neighbors of the PPL Susquehanna nuclear power plant*, October, 2008.

E. Eric Epstein's Contention 4 Should Be Deemed Admissible.

Conclusions in PPL's Application, Part 3: Environmental Report, Rev. 1, Chapter 4 and 5, relating to ***Socio Economic Impacts: Labor Force Availability and Possible Composition*** *4.4.2.2.1.,* ***Employment and Income*** *5.8.2.2.3 and* ***Police, EMS and Fire suppression Services*** *2.5.2 and 4.4.2., are based on flawed assumptions and specious conclusions, and have omitted key data and statistics that undermine the Applicant's determinations.*

Mr. Epstein has argued that PPL's Application is deficient because it has not adequately accounted for the population demographics in the area where Bell Bend has been proposed. Specifically, he states, "Pennsylvania is the third oldest state in the nation and its fastest growing population segment is octogenarians. An aging population base has unique and sensitized needs that were not factored, considered, or analyzed in the licensee's Application." (Epstein Petition, p. 29). He also has stated that a significant percentage of the population in Lucerne and Columbia counties are "low income." PPL did not sufficiently discuss the impact of these factors in its Application. (Epstein Petition, pp. 29-31).

At pages 49-50 of its Answer, PPL argues that the impacts identified by Mr. Epstein are unrelated to Bell Bend or are outside the scope of this proceeding. In addition, PPL argues that it did discuss the income distribution and age distribution for the two-county region and the relationship between an aging and out-migrating population and public services. (PPL Answer, p. 50-51).

PPL has admitted it had not examined the impact on senior citizens in Columbia and Luzerne Counties. 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 (12) as a result of the operation of the Susquehanna Steam Electric Station.

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12 PPL collects millions of dollars in tax revenues by charging ratepayers, i.e., $245 million (2007) and $265 (2006). ("PPL Corporation 2007 Annual Report," Summary of Significant Accounting Polices, p. 64).

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." (13)

Staff's argument is somewhat disjointed, and echoes PPL's inability to link an aging population base to understaffed and "fatigued" industry.

The retirement of Baby Boomers will affect the U.S. economy, "possibly in dramatic ways. For example, output will suffer...payroll benefit costs will balloon to finance increasing retirement and health care." For the power industry, "The situation is compounded by a shrinking supply of engineering graduates entering the utility industry...Given the likely preponderance of Baby Boomers among the current pool of 23,000 registered power engineers, the lack of graduates entering the workforce will exacerbate the problem." (14)

The problem is especially acute for the nuclear industry. "The U.S. graduates about 70,000 engineers each year, yet only 1,900 of those were enrolled in a nuclear degree program in 2007...In contrast the same study found that about 35 percent of the current nuclear workforce will reach retirement age in the next five years, which is consistent with data describing the entire power generation industry." (15)

Staff also suggested, "...Petitioner has not provided information that the aging population qualifies as low-income or minority, Petitioner has failed to demonstrate that additional analyses regarding the aging population are required by EJ purposes." (NRC Staff Answer, p. 42).

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

14 *Power Magazine: Business and Technology for the Global Generation Industry*, "The nuclear option," p. 6, November, 2008.

15 "The Talent Bubble," *Public Utilities Fortnightly*, February, 2004.

Mr. Epstein Petition clearly noted on page 29, fn 24:

> Pennsylvania is the third oldest state in the nation and its fastest growing population segment is octogenarians. An aging population base has unique and sensitized needs that were not factored, considered, or analyzed in the licensee's Application. Columbia and Luzerne Counties (16) 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 percent of the Luzerne County and 23 percent of the Columbia County populations qualify as "low-income households" eligible for energy assistance, i.e., living at or below the federal poverty levels.

The Applicant has not demonstrated that they can adequately staff Bell Bend or Susquehanna. PPL admitted to Region I at NRC's annual Assessment on the SSES on May 19, 2009 that they were struggling to comply with the new fatigue rule. Ron Smith, PPL's General Manager, Site Preparedness and Services, stated, "[The] biggest challenge is getting an additional [security] shift in by October 1, [2009.]"

NRC regulatory changes regarding fatigue and working hours at nuclear plants result from the issuance of the Part 26 Final Rule. The requirements of Subpart I in Part 26 must be implemented on or before October 1, 2009.

The NRC's new fitness-for-duty rule, released on March 31, 2009, is designed to avoid fatigue yet it is not worked into the COLA, factored into the Applicant's staffing strategy, or considered under socioeconomic. The NRC's new regulations are more aggressive than the old work-hour guidelines issued in 1982. For the first time, the NRC has the ability to police work-hour violations, yet the COLA is silent on compliance.

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16 In Luzerne County, the population declined 1.8 percent between 2000 and 2003, and Columbia experienced a 0.9 percent increase. The U.S. Census Bureau reported that the average population per county, of 65 years or older, is 12.4 percent. However, the percent in Luzerne is 19.7 percent and in Columbia it is 15 percent. In Salem Township, host to the nuclear plant, the percentage of residents over 65 years of age is 19.6 percent.

The new requirements include:

• Nuclear plant operators and security guards must get a 34-hour break every nine-day work period. Under the old guidelines, only eight or 10 hours off was required between shifts.

• Employees working 12-hour shifts must get two or two-and-a-half days off a week, averaged over no more than a six-week period. The old guidelines had no explicit day-off requirements.

In response to PPL and NRC staff, Mr. Epstein submits that this contention is relevant and material because an aging population affects staffing, offsite support staffing, response times, emergency planning and social services. These human components are critical ingredients in the infrastructure of any large industrial complex. The ripple impact of this factor was not discussed in the Application. The Application does not demonstrate how these factors impacted its proposal. This deficiency has been clearly identified. Consequently, the contention should be adopted.

VI. Conclusion.

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

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 four (4) contentions accepted.

Respectfully submitted,

Eric Joseph Epstein, Pro Se
4100 Hillsdale Road
Harrisburg, PA 17112
lechambon@comcast.net
Dated: June 19, 2009

CERTIFICATE OF SERVICE

I hereby certify that on this nineteenth (19) day of June, 2009 a copy of **Eric Joseph Epstein's Reply to Applicant's Answers and the Nuclear Regulatory Commission Staff's Answer to Eric Joseph Epstein Petition for Leave to Intervene, Request for Hearing, and Contentions with Supporting Factual Data Re: PPL Bell Bend LLC: Combined License Application for the Bell Bend Nuclear Power Plant Docket No. 52-039; NRC-2009-0112, Adams Accession No. ML082140630** was sent by electronic mail and by overnight delivery with tracking numbers to:

William J. Froehlich, Chair
Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Michael F. Kennedy
Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Randall J. Charbeneau
Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Office of the General Counsel, c/o
Robert Weisman, Esquire
Mail Stop O-15D21
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

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

Robert Heamer, Esquire
Counsel for Union Electric Comp.
Pillsbury, Winthrop, Shaw & Pittman
2300 N Street, NW
Washington, DC 20037-1122

David Repka, Esquire
Counsel for Applicant
Winston & Strawn
1700 K Street, NW
Washington D.C. 20006-3817

Gene Stilp
Taxpayers and Ratepayers United
275 Poplar Street
Wilkes-Barre, PA 18702

ENCLOSURE 1

Biography: Eric J. Epstein

Mr. Epstein has been involved with research into decommissioning, decontamination and nuclear safety at the Peach Bottom, Three Mile Island, and Susquehanna nuclear power plants for 25 years. He has written numerous professional papers, contributed to publications, and provided testimony regarding utility rates, electric power competition, and radioactive waste isolation.

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

He is also the Coordinator of the EFMR Monitoring group, a nonpartisan community based organization established in 1992. EFMR (efmr.org) monitors radiation levels at Peach Bottom and Three Mile Island nuclear generating stations, invests in community development, and sponsors remote robotics research.

Eric Epstein is a founding (1999) Board Member of the Sustainable Energy Fund of Central Eastern Pennsylvania (sustainableenergyfund.org) which focuses on sustainable energy companies and projects by obtaining financial leverage and promoting market development.

Epstein is also a Founding Board Member, Alternative Fuels Council based in Harrisburg, Pennsylvania. The AFC is a public-private partnership of leaders of alternative fuels producers and distributors, public interest advocates, renewable energy, and resource recovery.

Mr. Epstein is also Chairman of Stray Winds Area Neighbors (www.straywinds.org), a smart-growth property association (2005-Present).

Mr. Epstein was a Visiting Assistant Professor of Holocaust Studies at PSU-Harrisburg (1992-1999) and an Academic Coordinator at Tri-County OIC (1990-2002). He co-authored the *Dictionary of the Holocaust*, which was released by Greenwood Press (1997), and prepared the Appendices for the *The Holocaust Chronicle* (2000).