

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

LBP-07-10

ATOMIC SAFETY AND LICENSING BOARD PANEL DOCKETED 07/27/07

Before the Licensing Board:

SERVED 07/27/07

G. Paul Bollwerk, III, Chairman
Dr. Richard F. Cole
Lester S. Rubenstein

In the Matter of

PPL SUSQUEHANNA LLC

(Susquehanna Steam Electric Station, Units 1
and 2)

Docket Nos. 50-387-OLA and 50-388-OLA

ASLBP No. 07-854-01-OLA-BD01

July 27, 2007

MEMORANDUM AND ORDER
(Ruling on Standing and Contentions)

Before the Licensing Board is pro se petitioner Eric Joseph Epstein's May 11, 2007 hearing request in which he challenges certain aspects of the October 11, 2006 application of PPL Susquehanna LLC (PPL) for an extended power uprate (EPU) for the two nuclear reactors at its Susquehanna Steam Electric Station (SSES) located near Berwick, Pennsylvania. Both applicant PPL and the NRC staff contest petitioner Epstein's hearing request, asserting that he lacks standing and has failed to present an admissible issue statement.

Although we conclude that, in this instance, petitioner Epstein has made a showing that is minimally sufficient to establish his standing as of right, we also find he has failed to proffer an admissible contention. As such, we deny his hearing request and terminate this proceeding.

I. BACKGROUND

A. PPL Power Uprate Application

Seeking to increase the current maximum authorized power level for each of its two SSES units from 3489 megawatts thermal (MWt) to 3952 MWt, a thirteen percent increase, in its October 2006 application PPL requests that the 10 C.F.R. Part 50 operating licenses for both units be amended to change the associated technical specifications to implement uprated power operation. According to PPL, its EPU request,¹ which included a 350-page Power Uprate Safety Analysis Report (PUSAR) and a 54-page Environmental Report (ER),² is for a constant

¹ Power uprates are of three stripes. A measurement uncertainty recapture power uprate (MUPU), which involves an uprate of less than two percent, is achieved by implementing enhanced techniques for calculating reactor power, such as state-of-the-art feedwater flow measurement devices that more precisely gauge the feedwater flow used to calculate reactor power. These more precise measurements reduce the degree of uncertainty in the power level, which is used by analysts to predict the ability of the reactor to be safely shutdown under postulated accident conditions. A stretch power uprate (SPU), which is typically up to seven percent, is intended to stay within the design capacity of the plant. The actual percentage increase in power a plant can achieve and still stay within the SPU category depends on the plant-specific operating margins included in the facility's design. Therefore, an SPU usually involves changes to instrumentation setpoints, but does not involve major plant modifications. An EPU is greater than an SPU and has been approved for increases as high as 20 percent. An EPU requires significant modifications to major balance-of-plant equipment such as the high pressure turbines, condensate pumps and motors, main generators, and transformers. See <http://www.nrc.gov/reactors/operating/licensing/power-uprates.html#definition> (last visited July 26, 2007).

Previously the SSES units each were approved for an SPU (1994) and an MUPU (2001), which raised their rated power by 4.5 percent and 1.4 percent, respectively. See <http://www.nrc.gov/reactors/operating/licensing/power-uprates/approved-applications.html> (last visited July 26, 2007). These increases, when combined with the proposed 13 percent increase sought by PPL in the current amendment request, would bring the total power uprate for each of the SSES units to just under 20 percent.

² See [SSES] Proposed License Amendment Numbers 285 for Unit 1 Operating License No. NPF-14 and 253 for Unit 2 Operating License No. NPF-22 Constant Pressure Power Uprate, PLA-6076 (Oct. 11, 2006) (ADAMS Accession No. ML062900160) [hereinafter PLA-6076], id. attach. 3 (ADAMS Accession No. ML062900161) [hereinafter ER]; id. attach. 6 (non-proprietary version) (ADAMS Accession No. ML062900401) [hereinafter PUSAR].

pressure power uprate (CPPU) that would obtain increased electrical output by generating and supplying higher steam flow to the turbine generator rather than through any significant increase in reactor or main steam pressure or temperature. See [PPL] Answer to Eric Epstein's Petition for Leave to Intervene (June 5, 2007) at 2 [hereinafter PPL Answer].

B. Petitioner Epstein's Hearing Request/Licensing Board Establishment and Initial Procedures

In accord with a March 2, 2007 notice of the staff's consideration of the requested SSES operating license amendments, the staff's proposed no significant hazards consideration determination regarding the EPU application, and the opportunity to petition for a hearing on the PPL licensing request, see 72 Fed. Reg. 11,383, 11,392 (Mar. 13, 2007), on May 11, 2007, petitioner Epstein submitted his hearing request in which he seeks to establish his standing to participate in this proceeding and proffers three contentions contesting the PPL EPU application. See Eric Joseph Epstein's Petition for Leave to Intervene, Request for Hearing, and Presentation of Contentions with Supporting Factual Data (May 11, 2007) [hereinafter Intervention Petition]. Thereafter, on May 31, 2007, this Atomic Safety and Licensing Board was established to adjudicate the issues raised by petitioner Epstein relative to the PPL EPU application. See 72 Fed. Reg. 31,617 (June 7, 2007).

In an initial prehearing order issued that same day, see Licensing Board Memorandum and Order (Initial Prehearing Order) (May 31, 2007) (unpublished) [hereinafter Initial Prehearing Order], in addition to establishing several procedural measures to govern matters such as the filing of time extension motions, the Licensing Board indicated it found each of petitioner Epstein's three issue statements could be categorized as a technical contention (TC), as opposed to an environmental or miscellaneous contention.³ The Board also noted, however,

³ In its initial prehearing order, the Board indicated it reviewed the three contentions in
(continued...)

that if petitioner Epstein believed any of his existing contentions raised issues that could not be classified as primarily falling into that category, he could provide a supplement to his petition setting forth the contention and supporting bases separately for each category into which it is asserted to fall, with a separate designation for that category.⁴ See id. at 2.

On June 5, 2007, both PPL and the staff filed their responses to petitioner Epstein's hearing request, opposing his admission as a party based on his lack of standing and his failure to submit any admissible contentions. See PPL Answer at 1; NRC Staff Response to Eric Joseph Epstein's Petition for Leave to Intervene, Request for Hearing, and Contentions (June 5, 2007) at 1 [hereinafter Staff Answer]. On June 12, 2007, petitioner Epstein filed his reply to the PPL and staff answers. See Eric Joseph Epstein's Reply to [PPL] And NRC Staff's Responses to Eric Joseph Epstein's Petition for Leave to Intervene, Request for Hearings and Contentions (June 12, 2007) [hereinafter Petitioner Reply].

The following day, the Board issued an order proposing a schedule for a telephone prehearing conference during which the participants would be permitted to address orally the questions of petitioner Epstein's standing and the admissibility of his contentions. See Licensing Board Memorandum and Order (Initial Prehearing Conference Schedule; Argument Allocations) (June 13, 2007) at 1 (unpublished). After receiving participant input, the Board

³(...continued)

the context of the three classifications: (1) Technical, which primarily concern matters discussed or referenced in the October 2006 PPL EPU application, as supplemented, other than National Environmental Policy Act (NEPA)-related matters discussed in ER, or matters that are asserted should be discussed in the technical portions of the PPL application; (2) Environmental, which primarily concern NEPA-related matters discussed or referenced in the ER, or matters that are asserted should be discussed in the ER; and (3) Miscellaneous, which did not fall into one of the two categories outlined above. See Initial Prehearing Order at 2.

⁴ The Board also made it clear that these same designations should be used for any other contentions subsequently filed in this proceeding and that contentions bearing more than one designation (e.g., Technical-3/Environmental-3) were not acceptable. See id. at 2-3.

scheduled the prehearing conference for July 10, 2007. See Licensing Board Memorandum and Order (June 15, 2007) at 1 (unpublished). And on that date, the Board conducted the teleconference. See Tr. at 1-88.

II. ANALYSIS

A. Standing

1. Standards Governing Standing

In determining whether an individual or organization should be granted party status in a proceeding based on standing “as of right,” the agency has applied contemporaneous judicial standing concepts that require a participant to establish (1) it has suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. See Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996).

In this regard, in cases involving the possible construction or operation of a nuclear power reactor, the Commission has created a presumption that residing or regularly conducting activities within a fifty-mile proximity of the proposed facility is considered sufficient to establish the requisite injury, causation, and redressability elements.⁵ See Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). In other cases,

⁵ Coincidentally, the 50-mile radius around a facility utilized for this presumption conforms generally to the ingestion pathway emergency planning zone established for emergency planning purposes. See U.S. Nuclear Regulatory Comm’n & Federal Emergency Mgmt. Agency, NUREG-0654/FEMA-REP-1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants at 11 (rev. 1 Nov. 1980).

such as operating license amendment cases like this one, a petitioner must (1) assert an injury-in-fact associated with the challenged license amendment, not simply a general objection to the facility; and (2) in the absence of a showing that the proposed action obviously entails an increased potential for offsite consequences, base its standing upon more than residence or activities within a particular proximity of the plant by making a showing of a plausible chain of events that would result in offsite radiological consequences posing a distinct new harm or threat to the participant. See Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 188, 191-92 (1999). Moreover, even in those non-reactor construction permit/operating license cases involving an increased potential for offsite consequences in which proximity can be the primary basis for establishing standing, the distance at which a petitioner can be presumed to be affected must take into account the nature of the proposed action and the significance of the radioactive source. See Georgia Inst. of Technology (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 116 (1995); see also Consumers Energy Co. (Big Rock Point ISFSI), CLI-07-21, 65 NRC __, __ (slip op. at 4) (June 28, 2007) (difference in potential risk between independent spent fuel storage installation (ISFSI) and operating reactor justifies treating ISFSI and license transfer cases differently in terms of potential proximity presumption).

In assessing a hearing petition to determine whether the standing elements are met, which a presiding officer must do even if there are no objections to a petitioner's standing, see Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), LBP-04-27, 60 NRC 530, 542 n.3 (2004) (even if undisputed, jurisdictional nature of standing requires independent examination by presiding officer), the Commission has indicated that we are to “construe the petition in favor of the petitioner.” Georgia Tech Research Reactor, CLI-95-12, 42 NRC at 115.

We apply these precepts in evaluating petitioner Epstein’s standing presentation.

2. Petitioner Epstein's Standing

DISCUSSION: Intervention Petition at 4-7; PPL Answer at 3-9; Staff Answer at 4-5; Petitioner Reply at 2-3; Tr. at 10-12, 15-29.

Petitioner Epstein, who bears the burden of establishing his standing to intervene in this power uprate proceeding, see Babcock and Wilcox (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 81, appeal dismissed, CLI-93-9, 37 NRC 190 (1993), seeks to demonstrate his standing based on his concern that the proposed SSES power uprate amendment could compromise his health and safety by increasing his likelihood of exposure to radiological emissions or other toxic, caustic, or carcinogenic atmospheric discharges. See Intervention Petition at 7. Because petitioner Epstein lives more than fifty miles from the SSES,⁶ he asserts his standing in this proceeding is based on the extent of his day-to-day activities in the vicinity of the facility. Referencing a teleconference from another recently concluded Licensing Board proceeding in which he sought to intervene regarding a PPL request for a twenty-year extension of its operating authority for the SSES, he asserts that he "routinely" pierces the fifty-mile proximity zone. See id. at 6. In this regard, besides purported regular activities in Lebanon, Schuylkill, and Upper Dauphin counties in Pennsylvania, including shopping trips and hiking in the Appalachian Mountains, he also maintains that as a member of the Sustained Energy Fund's (SEF) Board of Directors he commutes to its Allentown, Pennsylvania offices, which he asserts are located approximately forty-seven miles from the SSES, as well as other Pennsylvania cities and towns -- purportedly located from approximately ten miles to forty-five miles from the SSES -- to attend various business meetings. See id.; Tr.

⁶ Although Mr. Epstein indicated in his petition that he lives 56 miles from the SSES, see Intervention Petition at 5, the Board's check of this claim using Mapquest (<http://www.mapquest.com>) and an American Automobile Association (AAA) Pennsylvania road map, see infra note 11, indicates that distance is closer to 60 miles.

at 22-23. Further in this regard, he provided a list of dates for SEF meetings -- four in May 2007 and eight in June 2007 -- that he was scheduled to attend (albeit without specifying which meetings took place where), see Petitioner Reply at 3, and indicated during the July 10 teleconference that each of those meetings is at least three hours long, see Tr. at 22. He additionally relies on the fact that the Licensing Board presiding over the SSES life extension proceeding found he had standing to intervene, essentially on the basis of this same showing. See Intervention Petition at 7 (citing PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 296 (2007)). Finally, referencing the Commission's Pebble Springs decision, he noted that "intervention can be allowed as a matter of discretion." Id. at 8 (citing Portland Gen. Elec. Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 614-17 (1976)).

Both PPL and the staff assert that petitioner Epstein's showing is inadequate to establish his standing. In summary fashion, the staff declares that petitioner Epstein has not demonstrated sufficiently frequent contacts within close proximity to the SSES. See Staff Answer at 4-5. In a more detailed analysis, PPL contends that there has been an insufficient showing to establish that a proximity presumption should be applied in this instance, so that petitioner Epstein's standing depends on traditional standing doctrine that requires a focus on the length and nature of his activities, including their proximity to the SSES site. PPL maintains that in the face of the inapplicability of the proximity presumption, petitioner Epstein's mere assertion that he may suffer injury in fact from radiation exposure is wholly insufficient to support his standing given his failure to proffer any specific and plausible means by which, as a consequence of the power uprate amendment, he will experience radiation exposure in the course of his activities. Additionally, according to PPL, whether or not a fifty-mile proximity presumption applies, petitioner Epstein's showing relative to his sojourns into the fifty-mile area

surrounding the SSES are insufficient to establish his standing because the trips are too infrequent and do not show any relationship or bond between petitioner Epstein and the plant site. See PPL Answer at 5-7.

As to the Licensing Board decision in the SSES license renewal case, PPL declares this case does not mandate a similar result here because a standing finding in one proceeding does not automatically grant standing in a second proceeding regarding that facility. Moreover, according to PPL, the earlier Board's decision is particularly inapposite here given petitioner Epstein's failure to show a distinct new harm or threat associated with the uprate amendment as well as the fact the Board ruling was both dicta and not subjected to review on appeal so as to be binding precedent. Finally, PPL declares that as the sole petitioner in this proceeding, having failed to establish his standing as of right, under Commission practice petitioner Epstein cannot be granted discretionary standing. See id. at 7-8.

RULING: As the cases make manifest, the benefits of the proximity presumption are not limited to those who reside within the area in which the presumption applies, but can be extended to those who conduct everyday activities or visit within that area.⁷ See Big Rock Point, CLI-07-21, 65 NRC at ___ (slip op. at 5-6); see also Zion, CLI-99-4, 49 NRC at 191; Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 226 (1974). Nonetheless, as is sometimes the case regarding the degree to which someone "resides" in the requisite area, see Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 35 (1993) (regular but intermittent residence one week a month in house

⁷ Although PPL in its response to petitioner Epstein's hearing request seemed to suggest that the proximity presumption was limited to those in residence within the appropriate area, see PPL Answer at 4, during the July 10, 2007 prehearing conference, PPL agreed that the presumption, if applicable, would encompass those who regularly undertake activities in that area, see Tr. at 18-19.

thirty-five miles from facility sufficient for standing purposes), there may be issues about the extent to which those activities and contacts are sufficient to invoke the presumption.

The relevant concern in this instance thus is whether the record reflects information that adequately demonstrates (1) the obvious potential for offsite consequences such that a proximity presumption would be applicable in this EPU proceeding; (2) the scope of the area within which the presumption would apply; and (3) whether petitioner Epstein has shown he has sufficient contacts within that area to establish the applicability of the presumption.

Relative to the first two items, the answer is found in the information applicant PPL provides in its response to petitioner Epstein's technical issue TC-3, which, as we will discuss further in section II.B.2.c *infra*, questions whether PPL has adequately characterized the accident consequences that will arise from the proposed EPU. In its response regarding that contention's admissibility, *see* PPL Answer at 28, PPL points to section 8.3 of the ER that accompanies its EPU application, which states:

Under EPU conditions, the dose consequences estimated in the [SSES operating license-related Final Environmental Impact Statements] can be reasonably and conservatively expected to increase by the percentage change in power level [from] the original licensed power to the EPU power level. In numerical terms this is approximately 20% (from 3293 MWt to 3952 Mwt).

ER at 8-9. From the Board's perspective, this establishes that this proposed EPU creates an obvious potential for offsite consequences. *See Entergy Nuclear Vermont Yankee, L.L.C.* (Vermont Yankee Nuclear Power Station), LBP-04-28, 60 NRC 548, 553-54 (2004) (EPU amendment involves increase in reactor core radioactivity with obvious potential for offsite consequences); *see also Tennessee Valley Auth.* (Sequoyah Nuclear Plant, Units 1 and 2; Watts Bar Nuclear Plant, Unit 1), LBP-02-14, 56 NRC 15, 25 (2002) (obvious offsite consequences to technical specification change that would add tens of millions of curies of radioactive gas to already significant core inventory). Moreover, given that the EPU is directly

associated with continuing reactor operation, we consider the potential geographic scope of such consequences to be similar to that which supported the creation of a presumption for construction permit and operating license proceedings. See Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 385 n.1 (1998) (fifty-mile presumption should apply to life extension cases because reactor operation over additional period subject to same equipment failure and personnel errors), aff'd, CLI-99-11, 49 NRC 328 (1999); see also Big Rock Point, CLI-07-21, 65 NRC at ___ (slip op. at 4) (in determining application of potential proximity presumption, potential risk difference between a reactor and an ISFSI justifies treating the ISFSI differently). As such, the application of a fifty-mile presumption is justified in this instance.⁸

A very much closer question is the sufficiency of petitioner Epstein's showing regarding his activities within such a radius of the SSES as a basis for invoking the presumption. As PPL pointed out, the Susquehanna life extension proceeding Board's standing ruling is not dispositive of our determination here because that decision was not the subject of appellate review.⁹ Rather, we must make a finding based on the factual circumstances presented by the

⁸ Noting that the trips described in petitioner Epstein's hearing request appear to take place "well to the southwest" of the SSES, PPL asserts he has failed to make a proper showing because he has not provided a "specific and reasonable means" by which his activities will result in a radiation exposure due to the uprate. PPL Answer at 7. Although the direction of Mr. Epstein's activities relative to the facility (in conjunction with the direction of the prevailing winds) might be an issue if the proximity presumption were found not to apply, it is not a relevant consideration within the proximity zone once that presumption is deemed applicable.

⁹ There is agency case law indicating that a petitioner's showing establishing standing in one proceeding need not be repeated to establish standing in another proceeding regarding that same facility. See U.S. Army (Jefferson Proving Ground Site), LBP-04-1, 59 NRC 27, 29 (2004); Georgia Inst. of Tech. (Georgia Tech Research Reactor), LBP-95-23, 42 NRC 215, 217 (1995). Nonetheless, given that a Board in one proceeding is not constrained to follow the rulings of another Board (absent explicit affirmation by the Commission), see Cleveland Elec. Illuminating Co. (Perry Nuclear Power Plant, Unit 1), LBP-92-4, 35 NRC 114, 125-26 (1992), rev'd on other grounds, CLI-93-21, 38 NRC 87 (1993), the better practice for a petitioner is to

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information before the Board regarding his activities, which, as the Commission has noted in the past, may include consideration of the proximity (i.e., is the activity within the presumption zone), timing, and duration of those activities. See Big Rock Point, CLI-07-21, 65 NRC at ___ (slip op. at 5-6); Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 324 (1999).

Not unexpectedly, this process of sifting and weighing the participants' factual proffers often calls upon a Board to make difficult choices, so that a petitioner who fails to provide specific information regarding the geographic proximity or the timing and duration of its visits only complicates matters for itself. See Private Fuel Storage, CLI-99-10, 49 NRC at 325. In this instance, petitioner Epstein's description of the timing (how often) and duration (how long) of his presumption zone activities is clearly not overpowering. Nonetheless he has been somewhat more forthcoming than the admitted petitioner in the Private Fuel Storage proceeding cited by PPL, see PPL Answer at 6, which simply described the activities in the area of the facility of the individual it was relying upon to establish standing as "frequent," CLI-99-10, 49 NRC at 324. Petitioner Epstein has indicated that, on average, about a half-dozen times a month,¹⁰ he has

⁹(...continued)
submit a fully developed showing regarding standing in each proceeding in which it seeks to intervene, regardless of whether it has previously been found to have standing relative to the facility that is the locus of the proceedings.

We also feel compelled to note our view that the SSES life extension Licensing Board's ruling regarding petitioner Epstein's standing does not constitute dicta. Given that a petitioner's failure to establish its standing is a jurisdictional flaw that likewise is fatal to its attempt to gain party status, it would seem that any discussion of its failure to proffer an admissible contention would be every bit as deserving of the "dicta" label. Moreover, to suggest that a Board's decision on one of these admission elements necessarily renders any discussion of the other superfluous fails to acknowledge that, as a practical matter, a decision addressing only one of these two items creates the potential for significant delay if that single determination is later overturned on appeal.

¹⁰ In addition to the four May and eight June dates referenced in his filings in this
(continued...)

traveled to and attended SEF business meetings at locations between ten and forty-seven miles from the SSES,¹¹ so as to place him inside the fifty-mile proximity zone for at least five hours per meeting.¹² While far from overwhelming, this information nonetheless indicates petitioner Epstein frequents the fifty-mile zone on a regular basis.

At the same time, we do not find compelling applicant PPL's assertion that, in contrast to the Private Fuel Storage proceeding in which the Commission noted that the visits claimed to establish standing were to a particular parcel of land that would be affected by one aspect of the proposed licensing action at issue, petitioner Epstein's SEF meetings apparently have nothing to do with the proposed EPU amendment or the SSES facility in general. See PPL Answer at 6. To be sure, the exact subject matter of the particular SEF business meetings attended by petitioner Epstein has not been delineated. Nonetheless, to the degree Mr. Epstein's relationship to the SSES facility and its operational activities is relevant, the nature of the SEF organization is apparent, see Tr. at 23-24; <http://www.theseef.org/kb/?View=entry&EntryID=24> (last visited on July 26, 2007), so that attending meetings in support of that organization's purpose of promoting non-nuclear "clean/renewable" energy projects in the PPL service territory

¹⁰(...continued)

proceeding, during the license renewal proceeding petitioner Epstein also proffered five April 2007 meeting dates at locations within a 50-mile proximity of the SSES. See Eric Joseph Epstein's Response to the [Licensing Board's] Request for Information (Mar. 11, 2007) at 3 (Docket Nos. 50-387-LR & 50-388-LR).

¹¹ Although the staff has suggested that at least three of the meeting locations specified by petitioner Epstein are more than 50 miles from the SSES, see Staff Answer at 4; Tr. at 20-21, in accord with 10 C.F.R. § 2.337(f), taking official notice of the locations and the distances to the various locations specified by petitioner Epstein, including the SEF offices, as denominated on Mapquest (<http://www.mapquest.com>) and an AAA Pennsylvania road map, it appears that all are within a 50-mile radius of the SSES.

¹² In addition to lasting at least three hours (and some requiring an overnight stay), each meeting requires travel from his home through the 50-mile proximity zone that would last between one and one and one-half hours each way. See Tr. at 28.

does not seem to us wholly unrelated to petitioner Epstein's interest in challenging this EPU as it facilitates continued, enhanced operation of a nuclear power facility.

In the end, bearing in mind the above-referenced Commission admonition that in the context of standing determinations hearing requests be construed in favor of a petitioner, see supra p. 6, as well as the somewhat greater latitude generally afforded pro se petitioners in drafting their intervention petitions, see Public Serv. Elec. and Gas Co. (Salem Nuclear Generating Station, Units 1 and 2), ALAB-136, 6 AEC 487, 489 (1973), we consider the activities specified by petitioner Epstein within a fifty-mile radius of the SSES to be of minimally sufficient regularity and duration to establish his injury-in-fact,¹³ as well as the traceability and redressability of that injury, such that he has standing to participate in this EPU proceeding.¹⁴

¹³ Many of the supposed activities petitioner Epstein referenced in his pleadings and during the prehearing conference are, for the purposes of determining his standing, irrelevant or inadequately delineated to be of much substantive value in establishing his standing. Given that standing depends on the petitioner's present circumstances (or the extent to which activities in the recent past reflect a likely pattern of future conduct), general assertions that a petitioner, who admittedly resides outside the zone, was "born and raised in this area," will "likely die in this area," and lived within the zone almost 20 years ago, Tr. at 11; or visits locations in the area outside the 50-mile proximity area (i.e., Grantsville and Halifax, Pennsylvania); or goes recreational hiking or shopping an unrevealed number of times at undisclosed locations purportedly in the zone, see Tr. at 22, 23; or has made a single personal trip or business trip into the zone, see Tr. at 25, are not particularly helpful to the presiding officer.

Ultimately, in seeking to establish standing to intervene in a licensing adjudication based on regular activities within a proximity zone (including business, recreational, or personal activities), a petitioner, whether pro se or otherwise, is best served by accurately delineating in as much detail as practicable the particulars associated with the proximity, timing, and duration of those activities.

¹⁴ As PPL notes, case law suggests that a traveler who occasionally traverses the 50-mile zone while driving on an interstate roadway to a vacation spot or shopping venue that itself is located more than 50 miles from a facility likely does not have standing to challenge a licensing request regarding that plant. On the other hand, as PPL's answer also denotes, the same may not be true for someone who commutes past the plant on that same road daily on the way to a work location at a similar distance. See PPL Answer at 6 & n.7 (citing Georgia Tech Research Reactor, CLI-95-12, 42 NRC at 117 (daily commute taking petitioner in front of facility
(continued...))

B. Petitioner Epstein's Contentions

1. Contention Admissibility Standards

Section 2.309(f) of the Commission's rules of practice specifies the requirements that must be met if a contention is to be deemed admissible. Specifically, a contention must provide (1) a specific statement of the legal or factual issue sought to be raised; (2) a brief explanation of its basis; (3) a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and (4) sufficient information demonstrating that a genuine dispute exists with regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief. See 10 C.F.R. § 2.309(f)(1)(i), (ii), (v), and (vi). In addition, the petitioner must demonstrate that the issue raised in the contention is both "within the scope of the proceeding" and "material to the findings the NRC must make to support the action that is involved in the proceeding." Id. § 2.309(f)(1)(iii), (iv). Failure to comply with any of these requirements is grounds for dismissing a contention. See Private Fuel Storage, CLI-99-10, 49 NRC at 325; see also Arizona Pub. Serv. Co. (Palo Verde Nuclear Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

¹⁴(...continued)

entrance sufficient to establish injury-in-fact)). Nothing we decide here today, however, does violence to either of those precepts.

Additionally, although we need not reach the question of discretionary standing given our determination regarding Mr. Epstein's standing as of right, we nonetheless observe that it is apparent discretionary standing will not lie in the absence of a finding that one intervening participant has standing as of right. See 10 C.F.R. § 2.309(e) (discretionary standing only appropriate when one petitioner has been shown to have standing as of right and admissible contention so that a hearing will be conducted).

NRC case law has further developed these requirements, as is summarized below:

a. Challenges to Statutory Requirements/Regulatory Process/Regulations

An adjudication is not the proper forum for challenging applicable statutory requirements or the basic structure of the agency's regulatory process. Philadelphia Elec. Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20, aff'd in part on other grounds, CLI-74-32, 8 AEC 217 (1974). Similarly, a contention that attacks a Commission rule, or which seeks to litigate a matter that is, or clearly is about to become, the subject of a rulemaking, is inadmissible. See 10 C.F.R. § 2.335; Potomac Elec. Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974). This includes contentions that advocate stricter requirements than agency rules impose or that otherwise seek to litigate a generic determination established by a Commission rulemaking. See Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 159, aff'd, CLI-01-17, 54 NRC 3 (2001); Pacific Gas and Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-93-1, 37 NRC 5, 29-30 (1993); Public Serv. Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982); see also Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 251 (1996); Arizona Pub. Serv. Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-19, 33 NRC 397, 410, aff'd in part and rev'd in part on other grounds, CLI-91-12, 34 NRC 149 (1991). By the same token, a contention that simply states the petitioner's views about what regulatory policy should be does not present a litigable issue. See Peach Bottom, ALAB-216, 8 AEC at 20-21 & n.33.

b. Challenges Outside Scope of Proceeding

All proffered contentions must be within the scope of the proceeding as defined by the Commission in its initial hearing notice and order referring the proceeding to the Licensing

Board. See 10 C.F.R. § 2.309(f)(1)(iii); Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000); Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). As a consequence, any contention that falls outside the specified scope of the proceeding must be rejected. See Portland Gen. Elec. Co. (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289 n.6 (1979).

c. Need for Adequate Factual Information or Expert Opinion

It is the petitioner's obligation to present factual information and/or expert opinion necessary to support its contention. See 10 C.F.R. § 2.309(f)(1)(v); Georgia Inst. of Tech. (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, vacated in part and remanded on other grounds and aff'd in part, CLI-95-10, 42 NRC 1, and CLI-95-12, 42 NRC 111 (1995). While a Board may appropriately view a petitioner's supporting information in a light favorable to the petitioner, failure to provide such information regarding a proffered contention requires the contention be rejected. See Palo Verde, CLI-91-12, 34 NRC at 155. In this connection, neither mere speculation nor bare or conclusory assertions alleging that a matter should be considered will suffice to allow the admission of a proffered contention. See Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003). If a petitioner neglects to provide the requisite support for its contentions, it is not within the Board's power to make assumptions of fact that favor the petitioner, nor may the Board supply information that is lacking. See Palo Verde, CLI-91-12, 34 NRC at 155; Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001), rev'd in part on other grounds, CLI-02-24, 56 NRC 335 (2002); Georgia Tech Research Reactor, LBP-95-6, 41 NRC at 305.

Likewise, simply attaching material or documents as a basis for a contention, without setting forth an explanation of that information's significance, is inadequate to support the admission of the contention. See Fansteel, CLI-03-13, 58 NRC at 204-05. Along these lines, any supporting material provided by a petitioner, including those portions of the material that are not relied upon, is subject to Board scrutiny. See Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90, rev'd in part on other grounds, CLI-96-7, 43 NRC 235 (1996). Thus, the material provided in support of a contention will be carefully examined by the Board to confirm that on its face it does supply an adequate basis for the contention. See Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990).

d. Materiality

To be admissible, the regulations require that all contentions assert an issue of law or fact that is material to the outcome of a licensing proceeding, meaning that the subject matter of the contention must impact the grant or denial of a pending license application. See 10 C.F.R. § 2.309(f)(1)(iv). This requirement of materiality often dictates that any contention alleging deficiencies or errors in an application also indicate some significant link between the claimed deficiency and either the health and safety of the public or the environment. See Yankee Nuclear, LBP-96-2, 43 NRC at 75-76; see also Pacific Gas and Elec. Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 439-41 (2002), petition for review denied, CLI-03-12, 58 NRC 185, 191 (2003).

e. Insufficient Challenges to the Application

All properly formulated contentions must focus on the license application in question, challenging either specific portions of or alleged omissions from the application (including the

Safety Analysis Report and the Environmental Report) so as to establish that a genuine dispute exists with the applicant on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi). Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed. See Sacramento Mun. Util. Dist. (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), review declined, CLI-94-2, 39 NRC 91 (1994); Texas Utilities Elec. Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992), appeals dismissed as moot, CLI-93-10, 37 NRC 192 (1993).

2. Technical Contentions (TC)¹⁵
 - a. TC-1 – PPL FAILED TO CONSIDER THE IMPACT OF ITS PROPOSED UPRATE ON WATER USE ISSUES¹⁶

CONTENTION:

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

¹⁵ Given the potential scheduling implications associated with the type of contention submitted by a petitioner, see 10 C.F.R. § 2.332(d); see also Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392 (2007), as was noted previously, as part of its initial prehearing order the Board, after reviewing his issue statements, denoted each of petitioner Epstein's contentions as a "technical contention." See supra note 3. Although the Board also indicated he had the opportunity to provide an additional, albeit separate, designation of "environmental" or "miscellaneous" for any of his contentions if he thought it appropriate, petitioner Epstein did not provide any further designations.

¹⁶ Because petitioner Epstein did not assign a title to any of his three contentions, the Board has done so based on the contention's content and stated bases. The language of this and his other contentions as set forth below is verbatim from his hearing petition.

316 (b) and their impact on power uprates at the Susquehanna Electric Steam Station. [Footnote omitted.]

Intervention Petition at 10.

DISCUSSION: Id. at 10-18; PPL Answer at 15-22; Staff Answer at 7-12; Petitioner Reply at 4-8; Tr. at 12-15, 29-54.

As petitioner Epstein explained during the July 10, 2007 prehearing conference, see Tr. at 48-49, at the crux of the concern he has sought to express in this contention is the possibility of a regulatory “gap” relative to the regulation of water withdrawal from the Susquehanna River by the SSES facility that will lead to health and safety impacts as a result of higher power operation of the SSES units in accord with the PPL EPU request. Specifically, he is concerned that (1) PPL in its application has not addressed the fact that, pursuant to the Pennsylvania State Water Plan and Act 220 of 2002 (Act 220), in March 2008 areas will be identified in which water use exceeds or is projected to exceed available supplies; and (2) the requested EPU will require modification of the existing Susquehanna River Basin Commission (SRBC) water use approval for the SSES to accommodate what will ultimately be an eight million gallon per day increase in its maximum demand limit for water withdrawal from the Susquehanna River.¹⁷ See Intervention Petition at 12-13, 17-18. According to petitioner Epstein, these items have safety significance because a decrease in the availability of water to SSES as a result either of an Act 220 designation or a denial of a pending December 2006 PPL EPU-related request to the SRBC for a water use approval modification, see id. exh. 1, may result in the facilities having to make power generation reductions based on compliance with water use restrictions. This, in turn, would result in the SSES units becoming more susceptible to the types of reactor scrams

¹⁷ In his contention, petitioner Epstein also makes reference to the absence of a Pennsylvania Public Utility Commission proceeding relating to “cost of water,” but supplies no further details as to what that proceeding might entail so as to provide an adequate basis for admitting this contention relative to such a purported deficiency.

and power changes of twenty percent or more that the NRC generally considers to have safety significance. See Tr. at 31-32. For their part, both PPL and the staff assert that these water withdrawal matters, in addition to lacking proper support to create a genuine material dispute, are irrelevant and immaterial to this license amendment proceeding. See PPL Answer at 22; Staff Answer at 8.

RULING: As apparently was the case relative to a similar contention (i.e., Contention 2) he sought to have admitted in the recently-concluded SSES license renewal adjudication (albeit unsuccessfully, see LBP-07-4, 65 NRC at 317-25), petitioner Epstein seemingly wishes to have this proceeding serve as the vehicle to promote coordination regarding facility water use among the various state and federal bodies -- including the SRBC, which operates under the aegis of a federal/state interstate compact -- having regulatory jurisdiction over the SSES. See Tr. at 41, 49. Unfortunately, this case is an equally inapposite forum to obtain that goal, because, among other things, the issues he seeks to raise are outside the scope of this proceeding and lack materiality in this context. See 10 C.F.R. §§ 2.309(f)(1)(iii), (iv).

To the degree the Act 220 and SRBC water use processes could indeed have an impact upon the availability of water from the Susquehanna River for use at the SSES,¹⁸ as PPL noted, see PPL Answer at 16-17, although it provides makeup water to the SSES cooling towers, the Susquehanna River is not a safety-related source of water for the SSES in the context of this amendment. Rather, both plants have an ultimate heat sink that consists of an eight-acre, 25-million gallon spray pond that must be maintained at specified water levels to provide cooling water sufficient to accommodate a design-basis loss of coolant accident in one unit, and bring

¹⁸ In its response, applicant PPL asserts that the Act 220 process is one that would only result in identifying areas in which water use exceeds, or is projected to exceed, available supplies, but does not itself provide any authority to regulate or control water withdrawal or use permits. See PPL Answer at 17-18.

both units to cold shutdown and maintain the units in that state -- as well as provide spent fuel pool cooling -- for thirty days. Under SSES technical specifications, if the delineated water levels are not maintained, PPL is required to take certain actions, which ultimately might include facility shut down. See Tr. at 35-39. Thus, petitioner Epstein's concern that the water availability shortfalls for SSES might occur sometime in the future as a consequence of the Act 220 and SRBC processes going forward lacks materiality in terms of any substantial health and safety implications.¹⁹

Additionally, as the Commission has made apparent in other contexts, see Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 121-22 (1998), absent some need for resolution to meet the agency's statutory responsibilities, the agency's adjudicatory process is not a forum for litigating matters that are primarily the responsibility of other federal or state/local regulatory agencies. To be sure, the EPU request will have implications in terms of increased water consumption, entrainment and impingement, and thermal and liquid effluent discharges, all of which are evaluated in the ER accompanying the PPL application that has not been the subject of petitioner Epstein's contentions. See ER §§ 7.2.1 to 7.2.4. At the same time, it is apparent water use-related permits under the jurisdiction of entities other than the NRC are associated with operating the SSES under the proposed EPU, in particular the SRBC-issued water use permit that is the

¹⁹ In this regard, even putting aside the speculative nature of the purported harm, which can occur only if the Act 220 and SRBC processes actually result in SSES water allocations that are inadequate for the facilities' needs, petitioner Epstein fails to provide any specific technical support for his concern, see 10 C.F.R. § 2.309(f)(1)(v), which was first voiced at the prehearing conference, about the degree to which curtailing SSES operations would have safety implications, other than the general statement that "[e]ach scram or power reduction creates a safety challenge." Tr. at 31. Certainly, nothing that has been presented suggests that the periodic modification of power generation levels that might possibly result from Susquehanna River water use restrictions would be the type of unplanned reactor scram that has been identified as potentially resulting in safety significant challenges to reactor systems.

subject of the PPL EPU-based revision request. Whether an SRBC permit revision is issued and what additional water use is approved may have a substantial impact on facility operation under an EPU. But relative to the merits of the PPL EPU application, and consistent with existing Commission precedent, whether that SRBC permit revision is issued and what facility operation limitations the revised permit may impose is not a matter within the scope of this proceeding.²⁰

²⁰ In addition to his concerns about current and future SSES water use pursuant to the Act 220 and SRBC processes, in seeking to provide a basis for this contention petitioner Epstein makes reference to an assortment of other purported PPL deficiencies, including (1) PPL noncompliance with thermal discharge/impingement/entrainment milestones under paragraphs (a) and (b) of section 316 of the Clean Water Act (CWA), 33 U.S.C. § 1326(a), (b), and the Environmental Protection Agency's final Phase II rules regarding cooling water intake structures at existing facilities, 69 Fed. Reg. 41,576 (July 9, 2004); (2) problems with PPL planning or reporting regarding shad ladders and controlling bacterial/fungal/algae contamination and asiatic clam and zebra mussel infestation using chlorinated water or molluscicides; (3) inadequate PPL responses to prior drought-induced water shortages; and (4) water fouling and fish kill incidents at other non-nuclear facilities operated by members of the PPL corporate family. See Intervention Petition at 14-17.

As PPL points out, see PPL Answer at 19-20, the alternative thermal effluent limitations afforded by CWA section 316(a) do not apply to the SSES because it employs closed-cycle cooling, while PPL's CWA section 316(b) compliance is outlined in section 7.2.3 of the ER, which petitioner Epstein does not contest, thereby rendering this concern an insufficient basis for this contention as lacking adequate factual support and failing to allege any genuine material dispute with the portion of the application that is relevant to his concern. See 10 C.F.R. § 2.309(f)(1)(v), (vi).

So too, petitioner Epstein failed to provide a sufficient factual basis to support a genuine material dispute with the PPL application regarding his shad ladder/contamination/infestation claims given (a) the nearest shad ladders are on dams 100 miles below the SSES, see PPL Answer at 21; (b) he provides no evidence of biological fouling at SSES, see Intervention Petition at 15 (discussing Three Mile Island (TMI) facility-related circumstances); Petitioner Reply at 8 n.15 (same); and (c) as the ER indicates, ER §§ 7.2.2, 7.2.5, and petitioner Epstein does not contest, there is no evidence zebra mussels have been found anywhere in the vicinity of the SSES, the asiatic clam is being controlled with an approved molluscicide in the spray pond, and any chlorine discharge is controlled under a National Pollutant Discharge Elimination System (NPDES) permit. See 10 C.F.R. § 2.309(f)(1) (v), (vi).

Regarding the drought-related shortages, in the face of petitioner Epstein's continuing assertion that ongoing SSES water use consistent with its existing SRBC permit is somehow
(continued...)

Accordingly, we decline to admit this contention for litigation in this proceeding.

- b. TC-2 – PPL FAILED TO DISCLOSE DAMAGING INFORMATION REGARDING FAULTY AND CORRODED INTAKE PIPING

CONTENTION:

PPL failed to disclose damaging information included in a hastily filed Application for Surface Water Withdrawal. [Footnote omitted.] “[W]hen a party has relevant evidence within his control which he fails to produce, that failure gives rise to an inference that the evidence is unfavorable to him.” [Footnote omitted.]

Intervention Petition at 19.

DISCUSSION: Id. at 19-25; PPL Answer at 22-27; Staff Answer at 12-14; Petitioner Reply at 9; Tr. at 54-69.

The crux of this contention is petitioner Epstein’s assertion that the PPL EPU application is deficient because it does not include plans for repairing faulty and corroded piping and inaccurate flow meters associated with the SSES Susquehanna River water intake system, despite having identified this deficiency in its pending December 2006 SRBC application seeking an increase in its current surface water withdrawal maximum daily limit. According to petitioner Epstein, PPL’s failure to address, correct, and analyze the problems associated with

²⁰(...continued)

deficient or improper so as to warrant Board review of SSES water use generally, see Petitioner Reply at 6-7, and the uncontroverted PPL showing that during the drought it conformed to the SRBC requirement that the SSES compensate consumptive water use during river low flow conditions by sharing the costs of the Cowanesque Lake Reservoir, which provides a river flow augmentation source, see PPL Answer at 19, we likewise find this assertion provides an inadequate factual basis to create a genuine material dispute with the PPL application. See 10 C.F.R. § 2.309(f)(1)(v), (vi).

Finally, relative to the purported water fouling incidents, petitioner Epstein’s assertions regarding members of the PPL corporate family who are not NRC licensees fall far short of what is required to establish circumstances that would create a genuine material dispute regarding the potential for such activities by PPL, which is an NRC licensee, during the course of SSES EPU operation. See id. § 2.309(f)(1)(v); see also GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000) (absent evidence to the contrary, it is assumed NRC licensees will not contravene agency regulations).

the river intake system significantly reduces SSES safety margins, undermines PPL's evaluation of the impact the EPU would have on water-related components and systems, and deprives PPL of the ability to accurately gauge the amount of water passing through the plant's cooling system for consumption, cooling, and discharge purposes. See Intervention Petition at 20-23. PPL and the staff assert, however, that the river intake system has no relevance to PPL's EPU application by reason of the fact it relates only to SRBC-imposed requirements and is not relied upon for NRC safety-related analyses or any other relevant purpose. See PPL Answer at 23-24; Staff Answer at 12-13.

RULING: In arguing that PPL wrongly omitted information from its application, petitioner Epstein makes no mention of any NRC requirement for such disclosures, but rather cites only to Act 220 and related SRBC regulations that he states require accurate metering to within five percent on the water diverted to the SSES. As we explained with respect to TC-1, see supra pp. 22-23, this proceeding is not the proper forum for litigating matters that are primarily the responsibility of other federal/state/local regulatory agencies. Further, as we also explained previously, see supra pp. 21-22, although the river intake system provides makeup water for the SSES cooling system, it is not a safety-related system relative to PPL's EPU application. Thus, like issue statement TC-1, contention TC-2 is inadmissible for failing to raise any issues that are within the scope of this cause or are material to the safety findings the NRC must make in this EPU proceeding. See 10 C.F.R. § 2.309(f)(1)(iii), (iv).

We likewise reject petitioner Epstein's argument, first articulated during the July 10 prehearing conference, that the alternative method currently in use by PPL for measuring water withdrawal and consumptive use is inadequate such that additional monitoring should be implemented. See Tr. at 65-68; see also Intervention Petition, exh. 1, at 5 (Letter from Jerome S. Fields, PPL Senior Environmental Scientist-Nuclear, to Paul O. Schwartz, Executive Director,

SRBC at 3 (Dec. 20, 2006)). Issues regarding the adequacy of the SSES river intake flow meters and the methods used to measure water withdrawal are wholly within the purview of the SRBC and so outside the scope of this EPU proceeding. See 10 C.F.R. § 2.309(f)(1)(iii). If he believes the methodology currently being used by PPL violates SRBC regulations, petitioner Epstein is best served by raising that concern before the SRBC.

Finally, we must reject this contention because petitioner Epstein does not provide any support for his allegation that PPL's failure to submit information regarding the river intake system in its EPU application and to analyze and correct that item significantly reduces the SSES safety margin and undermines its evaluation of EPU impacts on water-related components and systems. In his intervention petition and reply pleading, petitioner Epstein does not support this claim with any citation to the portions of the PPL application he believes are deficient because they lack this information, or reference any documentation or expert opinion that supports his margin of safety reduction assertion or identifies the water-related components and systems he believes are in jeopardy. Additionally, this concern fails to merit admission on scope and materiality grounds because it again is based on the misdirected premise that, in the context of this EPU application, the river intake system is a safety-related structure such that alleged inaccuracies with its withdrawal metering would have safety significance. See 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v), (vi).²¹

²¹ Besides these main points, petitioner Epstein references several additional claimed deficiencies in the PPL river intake system, including (1) the failure of the PPL application to provide for adequate inspection of systems and components that may contain radioactively contaminated water; (2) the water intake variable undermines PPL's ability to affix the appropriate chemical dosage needed to defeat thermal aquatic invasions not planned for in connection with its original operating license or the present EPU amendment; (3) the water intake variable presents increased safety challenges by undermining and disrupting the SSES borated water formula; (4) the EPU entails additional stream flow introduced into the high pressure environment of the turbines so as to cause turbine blade stress cracking; and (5) the EPU application does not contain an adequate analysis of the effect of the EPU on aging

(continued...)

For these reasons, we also reject issue statement TC-2 as inadmissible.

- c. TC-3 – PPL FAILED TO CONSIDER THE CONSEQUENCES OF AN ACCIDENT CAUSED BY ITS PROPOSED UPRATE

CONTENTION:

The proposed change involves a significant increase in the “consequences” of an accident than previously evaluated, and the amount of radioactivity in the reactor core (and thus available for release in event of an accident) is significantly more at 120% power than at 100% power.

Intervention Petition at 26.

DISCUSSION: Id. at 26-28; PPL Answer at 27-29; Staff Answer at 14-16; Petitioner

Reply at 10; Tr. at 69-82.

²¹(...continued)

equipment such as occurred relative to the steam dryers during an EPU test at the Quad Cities facility. See Intervention Petition at 22-25.

We find each of petitioner Epstein’s vague and unsupported assertions insufficient to support this contention’s admissibility. See 10 C.F.R. § 2.309(f)(1)(v), (vi). Relative to his concerns about radioactively contaminated water and borated water systems, petitioner Epstein fails to show any relationship between the intake system that feeds the SSES cooling basin and facility systems and components containing radioactive water (including underground pipes and tanks) or the standby liquid control system that uses borated water. His chemical dosage concern likewise is lacking given, as we have already explained, the PPL ability to apply molluscicides to the spray pond. See supra note 20. And as to his turbine blade stress and steam dryer claims, he has failed to identify any deficiencies in the PPL application’s discussions of planned EPU-associated turbine and steam dryer design and component changes, which include installing upgraded turbine blades and steam dryers, analyses of turbine missile risk probabilities and replacement steam dryer fatigue at CPPU conditions, and a PPL commitment to a steam dryer inspection program. See PUSAR at 7-1 to 7-3; [SSES] Proposed License Amendment No. 285 for Unit 1 Operating License No. NPF-14 and Proposed License Amendment No. 253 for Unit 2 Operating License No. NPF-22 [CPPU] - Supplement, PLA-6138, at 2 (Dec. 4, 2006) (ADAMS Accession No. ML063460354); PLA-6076, attach. 14, at 8 (non-proprietary version of steam dryer evaluation) (ADAMS Accession No. ML062900162); [SSES] Proposed License Amendment No. 285 for Unit 1 Operating License No. NPF-14 and Proposed License Amendment No. 253 for Unit 2 Operating License No. NPF-22 [CPPU] - Supplement, PLA-6146, encl. 2, at 1 (Dec. 26, 2006) (non-proprietary version of replacement steam dryer fatigue analysis) (ADAMS Accession No. ML070040383). These claims thus lack merit as bases for an admissible contention as well.

Petitioner Epstein bases this contention on the notion that PPL and the staff have not examined the “consequences” of an accident associated with the proposed EPU and the increased core radioactivity it would entail. See Intervention Petition at 27-28. Also, in his reply pleading, petitioner Epstein posited two possible scenarios that needed to be evaluated, i.e., “spent fuel failure in Transnuclear [NUHOMS] 61BT casks from [high-level transuranic] waste; and, density problems associated with re-racking spent fuel cells to accommodate off-core fuel loads.” Petitioner Reply at 10. PPL and the staff, on the other hand, noted that PPL did analyze accident consequences in sections 8.3 to 8.5 and section 9.2 of its PUSAR and ER sections 8.2 and 8.3, none of which petitioner Epstein cited or made any attempt to critique. See PPL Answer at 28-29; Staff Answer at 15-16. In the context of its prehearing conference presentation, PPL also objected to petitioner Epstein’s reply scenarios as an improper attempt to raise new information in a reply pleading and as inadequate to provide a basis for an admissible contention. See Tr. at 71-72. Accordingly, PPL and the staff concluded that petitioner Epstein has not met the section 2.309(f) admissibility requirements for this contention either.²²

RULING: Contrary to petitioner Epstein’s assertion, it is apparent PPL did provide an evaluation of the “consequences” of the proposed EPU in both the technical and environmental

²² In addition, both PPL and the staff argue that this contention is merely an impermissible challenge to the staff’s proposed finding of no significant hazards consideration, which is a prerequisite to staff issuance of an amendment granting the PPL EPU request prior to the conclusion of this adjudication. See PPL Answer at 27; Staff Answer at 15. While petitioner Epstein never explicitly states that he is challenging the staff’s proposed finding of no significant hazards consideration, to whatever extent this issue statement (or his other contentions) might be construed as attempting to mount such a challenge, they clearly would be improper. As the agency’s rules state, “[n]o petition or other requests for review on the staff’s significant hazards consideration determination will be entertained by the Commission. The staff’s determination is final, subject only to the Commission’s discretion on its own initiative, to review the determination.” 10 C.F.R. § 50.58(b)(6); see also Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-05-14, 61 NRC 359, 361 n.2 (2005).

portions of its EPU application. Section 9.2 of the PUSAR addresses the radiological consequences of design basis accidents for the SSES, see PUSAR at 9-4,²³ while ER section 8.3 reviews the potential environmental impact and radiological consequences of reactor accidents, see ER at 8-8 to 8-10; see also supra p. 10. Contrary to the dictates of section 2.309(f)(1)(vi), petitioner Epstein fails to refer to either of these portions of the application or contend that the analyses they discuss are inadequate. Further, in connection with his cask failure and spent fuel re-racking concerns, not only were they an impermissible attempt to introduce a new argument to establish a contention's admissibility in the context of a reply pleading, see Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225, reconsideration denied, CLI-04-35, 60 NRC 619, 623-24 (2004), but he has failed to provide any statement of alleged facts, specific sources or documents, or expert opinion that would support the scenarios as required under section 2.309(f)(1)(v).²⁴

²³ In this regard, the PPL PUSAR references a previous PPL accident source term analysis that was prepared, among other things, in anticipation of the EPU amendment request. See [SSES] Proposed Amendment No. 281 to License NPF-14 and Proposed Amendment No. 251 to License NPF-22: Application for License Amendment and Related Technical Specification Changes to Implement Full-Scope Alternative Source Term In Accordance with 10 CFR 50.67, PLA-5963, at 2, 3 (Oct. 13, 2005) (ADAMS Accession No. ML060120353).

²⁴ Relative to these concerns, we also note that petitioner Epstein's spent fuel cask failure assertion appears to be an impermissible challenge to the rulemaking certification of those casks under 10 C.F.R. Part 72, see 10 C.F.R. § 72.214, while his spent fuel re-racking concern seemingly was addressed in the application PUSAR. In the PUSAR, PPL notes that the increased heat from the uprate "will result in a higher heat load in the fuel pool during long-term storage," but also declares that the current fuel racks are "designed for higher temperatures (212°F) than the licensing limit of 125°F. There is no effect on the design of the SSES fuel racks because the original fuel pool design temperature is not exceeded." PUSAR at 6-6. Furthermore, in evaluating the changes needed to the SSES technical specifications resulting from the EPU, PPL's analysis showed that a new fuel design is not required for this EPU. "The current fuel design limits will continue to be met at CPPU conditions. Analyses for each fuel reload will continue to meet the criteria accepted by the NRC. Future fuel designs will meet acceptance criteria accepted by the NRC." PLA-6076, attach. 1, at 24 (evaluation of proposed technical specification changes for EPU) (ADAMS Accession No. ML062900160). Petitioner Epstein has not alleged that these analyses are inadequate.

In short, petitioner Epstein's issue statement TC-3 does not meet the requirements governing the admission of litigable contentions and so must be dismissed.

III. CONCLUSION

Although the record before the Licensing Board contains information that is minimally sufficient for the Board to conclude that petitioner Eric Joseph Epstein has met his burden of establishing his standing as of right to participate in this proceeding, relative to his three technical contentions, the Board has determined that none is admissible, either as outside the scope of this proceeding and/or as lacking materiality, adequate factual support, or sufficient information to demonstrate a genuine material factual or legal dispute exists with PPL relative to its EPU application. Accordingly, his hearing request is denied.²⁵

For the foregoing reasons, it is this 27th day of July 2007, ORDERED, that:

1. Relative to the contentions specified in section II.B.2 above, the Licensing Board having concluded that none of the proffered issue statements is admissible, petitioner Epstein's hearing request is denied.

2. In accordance with the provisions of 10 C.F.R. § 2.311, as it rules upon an intervention petition, any appeal to the Commission from this memorandum and order must be

²⁵ Given we conclude we are unable to grant petitioner Epstein's hearing request, we need not reach his argument that a formal hearing under 10 C.F.R. Part 2, Subpart G, is appropriate for litigating issue statement TC-2. See Petitioner Reply at 10.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
PPL SUSQUEHANNA LLC) Docket Nos. 50-387/388-OLA
)
)
(Susquehanna Steam Electric Station,)
Units 1 and 2)

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON STANDING AND CONTENTIONS) (LBP-07-10) have been served upon the following persons by U.S. mail, first class, or through NRC internal distribution.

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Docket Nos. 50-387/388-OLA
LB MEMORANDUM AND ORDER (RULING ON
STANDING AND CONTENTIONS) (LBP-07-10)

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Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 27th day of July 2007