

January 22, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
ENTERGY NUCLEAR OPERATIONS, INC.) Docket Nos. 50-247/286-LR
)
(Indian Point Nuclear Generating)
Units 2 and 3))

NRC STAFF'S RESPONSE TO PETITIONS FOR LEAVE TO INTERVENE FILED BY
(1) WESTCHESTER CITIZEN'S AWARENESS NETWORK, ROCKLAND
COUNTY CONSERVATION ASSOCIATION, PUBLIC HEALTH AND
SUSTAINABLE ENERGY, SIERRA CLUB – ATLANTIC CHAPTER,
AND ASSEMBLYMAN RICHARD BRODSKY,
AND (2) FRIENDS UNITED FOR SUSTAINBLE ENERGY,USA

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
BACKGROUND	3
DISCUSSION	6
I. Standing to Intervene	6
A. Applicable Legal Requirements	6
B. The Petitioners' Standing to Intervene	9
1. Petitioners Represented in the PHASE Petition	9
a. WestCAN	9
b. RCCA	10
c. PHASE	11
d. The Sierra Club – Atlantic Chapter	12
e. Assemblyman Richard L. Brodsky	17
2. FUSE	19
II. The Admissibility of Petitioners' Proffered Contentions	22
A. Legal Requirements for Contentions	22
1. General Requirements	22
2. Scope of License Renewal Proceedings	26
B. Analysis of the Petitioners' Proposed Contentions	31
1. Contentions Filed by the PHASE Petitioners	31
2. Contentions Filed by FUSE	108
III. Requests for Relief	168
A. Request for a Subpart G Proceeding	168
CONCLUSION	171

January 22, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
ENTERGY NUCLEAR OPERATIONS, INC.) Docket Nos. 50-247/286-LR
)
(Indian Point Nuclear Generating)
Units 2 and 3))

NRC STAFF'S RESPONSE TO PETITIONS FOR LEAVE TO INTERVENE FILED BY
(1) WESTCHESTER CITIZEN'S AWARENESS NETWORK, ROCKLAND
COUNTY CONSERVATION ASSOCIATION, PUBLIC HEALTH AND
SUSTAINABLE ENERGY, SIERRA CLUB – ATLANTIC CHAPTER,
AND ASSEMBLYMAN RICHARD BRODSKY,
AND (2) FRIENDS UNITED FOR SUSTAINBLE ENERGY, USA

INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the Staff of the U.S. Nuclear Regulatory Commission ("NRC Staff") hereby files its response to the petitions for leave to intervene filed in this proceeding (1) by Westchester Citizen's Awareness Network ("WestCAN"), Rockland County Conservation Association ("RCCA"), Public Health and Sustainable Energy ("PHASE"), the Sierra Club – Atlantic Chapter ("Sierra Club"), and Assemblyman Richard Brodsky,¹ and (2) by Friends United for Sustainable Energy, USA ("FUSE").²

¹ See "Petition to Intervene with Contentions & Request for a Hearing re: License Renewal Application for Indian Point 2 and Indian Point 3," filed by WestCAN, RCCA, PHASE, the Sierra Club, and Assemblyman Richard Brodsky on December 10, 2007 (hereinafter referred to as "PHASE Petition").

² See FUSE's "Superceding Request for Hearing and Petition to Intervene" ("FUSE Petition"), dated December 24, 2007.

In the following discussion, the Staff provides, first, a brief description of the background of this license renewal proceeding; second, a discussion of each petitioner's standing to intervene in the proceeding, and; third, a discussion of the admissibility of each petitioner's proposed contentions.³ As more fully set forth below, while WestCAN, RCCA, PHASE and FUSE have established their standing to intervene, certain other petitioners named in the PHASE Petition (the Sierra Club and Richard Brodsky) have not done so; further, Mr. Brodsky's petition to intervene as a party in this proceeding was filed late without a showing of good cause as required by 10 C.F.R. § 2.309(c), and is barred by the Licensing Board's Order of December 13, 2007.⁴ Accordingly, the Sierra Club's and Mr. Brodsky's requests to intervene should be denied.

The Staff submits that the PHASE Petitioners and FUSE have proffered at least one admissible contention. However, the Staff notes that both the Staff and Entergy have filed motions to strike FUSE's Petition and to dismiss that organization from the proceeding. See (1) "NRC Staff's Motion to Strike the 'Superceding Request for Hearing and Petition to Intervene' filed by [FUSE]," dated January 4, 2008; (2) "NRC Staff's Supplement to Its Motion to Strike FUSE's Superceding Petition," dated January 9, 2008, and (3) "Motion of Entergy Nuclear Operations, Inc. to Strike Superceding Request for Hearing and Petition to Intervene by Friends United for Sustainable Energy, USA," dated January 10, 2008. A ruling on either or both of

³ The Staff is filing, simultaneously herewith, its response to seven other petitions for leave to intervene that were filed in this proceeding. See "NRC Staff's Response to Petitions for Leave to Intervene Filed by (1) Connecticut Attorney General Richard Blumenthal, (2) Connecticut Residents Opposed to Relicensing of Indian Point, and Nancy Burton, (3) Hudson River Sloop Clearwater, Inc., (4) the State of New York, (5) Riverkeeper, Inc., (6) the Town of Cortlandt, and (7) Westchester County," dated January 22, 2008.

⁴ "Order (Denying Assemblyman Richard L. Brodsky's Request for an Extension)," dated December 13, 2007.

these motions may avert the need to address FUSE's standing to intervene and/or the admissibility of its contentions.

BACKGROUND

This proceeding arises from the application of Entergy Nuclear Operations, Inc. ("Entergy" or "Applicant") to renew the operating licenses for Indian Point Nuclear Generating Units 2 and 3 ("IP2" and "IP3"), which Entergy submitted by letter dated April 23, 2007, on behalf of itself, Entergy Nuclear Indian Point 2, LLC, and Entergy Nuclear Indian Point 3, LLC.⁵ Indian Point Units 2 and 3 are located at the "Indian Point Energy Center," situated on the east bank of the Hudson River in Buchanan, NY. Units 2 and 3 are pressurized water reactors ("PWRs") supplied by Westinghouse Electric Corp.; each reactor is authorized to operate at 3216 megawatts thermal (mWt), which corresponds to a turbine generator output of 1078 MWe and 1080 MWe, respectively.⁶ The current licenses for Indian Point Units 2 and 3 expire on

⁵ Letter from Fred Dacimo, Site Vice President (Entergy) to NRC Document Control Desk, dated April 23, 2007 (ADAMS Accession No. ML071210108), as supplemented by letters dated May 3 and June 21, 2007 (ADAMS Accession Nos. ML071280700 and ML071800318).

⁶ Units 2 and 3 share the site with Indian Point Unit 1. The LRA states that "Unit 1 was permanently shut down on October 31, 1974, and has been placed in a safe storage condition (SAFESTOR) until Unit 2 is ready for decommissioning." LRA at 1-7. The Unit 1 license is subject to the provisions of 10 C.F.R. §§ 50.51(b) and 50.82. Entergy does not seek here to renew the license for Unit 1, however, Entergy states that it considered certain features of Unit 1 in the LRA for Units 2 and 3:

Although the extension of the IP1 license is not a part of this license renewal application, IP1 systems and components interface with and in some cases support the operation of IP2 and IP3. Therefore, IP1 systems and components were considered in the scoping process (see Section 2.1.1). The aging effects of Unit 1 SSCs within the scope of license renewal for IP2 and IP3 will be adequately managed so that the intended functions will be maintained consistent with the current licensing basis throughout the period of extended operation.

(continued. . .)

September 28, 2013, and December 12, 2015; Entergy's license renewal application ("LRA" or "Application") seeks to authorize operation of Units 2 and 3 for an additional 20 years beyond the period specified in the current licenses, *i.e.*, until September 28, 2033, and December 12, 2035, respectively. See LRA at 1-1, 1-4, 1-6.

On May 11, 2007, the NRC published a notice of receipt of the Indian Point LRA,⁷ and on August 1, 2007, the NRC published a notice of acceptance for docketing and notice of opportunity for hearing on the LRA.⁸ The Notice required that petitions for leave to intervene and requests for hearing be filed by October 1, 2007;⁹ this deadline was later extended to November 30, 2007,¹⁰ and to December 10, 2007 for persons who alleged that their preparation of a petition to intervene was impeded due to their inability to access documents in the NRC's Agencywide Documents Access and Management System ("ADAMS").¹¹ Petitions for leave to

(. . .continued)

LRA at 1-7.

⁷ "Entergy Nuclear Operations, Inc.; Notice of Receipt and Availability of Application for Renewal of Indian Point Nuclear Generating Unit Nos. 2 and 3; Facility Operating License Nos. DPR-26 and DPR-64 for an Additional 20-Year Period," 72 Fed. Reg. 26,850 (May 11, 2007).

⁸ "Entergy Nuclear Operations, Inc., Indian Point Nuclear Generating Unit Nos. 2 and 3; Notice of Acceptance for Docketing of the Application and Notice of Opportunity for Hearing Regarding Renewal of Facility Operating License Nos. DPR-26 and DPR-64 for an Additional 20-Year Period," 72 Fed. Reg. 42,134 (Aug. 1, 2007).

⁹ *Id.*, 72 Fed. Reg. at 42,135.

¹⁰ "Entergy Nuclear Operations, Inc., Indian Point Nuclear Generating Unit Nos. 2 and 3, Notice of Opportunity for Hearing Regarding Renewal of Facility Operating License Nos. DPR-26 and DPR-64 for an Additional 20-Year Period: Extension of Time for Filing of Requests for Hearing or Petitions for Leave to Intervene in the License Renewal Proceeding," 72 Fed. Reg. 55,834 (Oct. 1, 2007).

¹¹ The Commission granted FUSE an extension of time to file its petition to intervene, until December 10, 2007, based on its allegation that the temporary unavailability of ADAMS impeded its ability to file on time. Commission Order of November 16, 2007. The Licensing Board subsequently (continued. . .)

intervene were then filed by these and other petitioners. In addition, on December 10, 2007, CRORIP filed a petition under 10 C.F.R. § 2.335, seeking a waiver of the Commission's regulations adopting the "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" ("GEIS"), with regard to (a) its exclusion of radiation exposures to the public and occupational radiation exposures during the license renewal term as Category 1 issues, and (b) the use of certain dose models in the GEIS.¹²

On October 18, 2007, an Atomic Safety and Licensing Board ("Licensing Board" or "Board") was established to rule on petitions for leave to intervene and hearing requests, and to preside over any proceeding that may be held.¹³ Since that time, the Licensing Board has issued a number of Orders addressing procedural requirements and administrative matters, including Orders concerning FUSE and the PHASE Petitioners,¹⁴ and the Board denied the petitions for leave to intervene filed by three organizations that failed to proffer an admissible

(. . .continued)

granted the same extension of time to CRORIP and others who raised similar allegations. See, e.g., "Order (Granting an Extension of Time to CRORIP Within Which to File Requests For Hearing)," dated December 5, 2007.

¹² The Staff is filing, simultaneously herewith, a response to CRORIP's petition for waiver. See "NRC Staff's Response to the Petition for Waiver of Commission Regulations filed by Connecticut Residents Opposed to Relicensing of Indian Point (CRORIP)," dated January 22, 2008.

¹³ "Establishment of Atomic Safety and Licensing Board," 72 Fed. Reg. 60,394 (Oct. 24, 2007).

¹⁴ See, e.g., (1) "Memorandum and Order (Administrative Matters and Directing Parties Attention to the Requirements for Proper Service)," dated October 29, 2007; (2) "Memorandum and Order (Denying Entergy's Motion to Strike But *Sua Sponte* Striking FUSE's Multiple Requests for Hearing)," dated November 28, 2007; (3) "Order (Censure of Sherwood Martinelli)," dated December 3, 2007, *affirmed*, CLI-07-28, 66 NRC ____ (Dec. 12, 2007) (slip op.); and (4) "Order (Barring Sherwood Martinelli From Further Participation in This Proceeding)," dated December 13, 2007.

contention.¹⁵ Following the dismissal of those petitions, nine petitions for leave to intervene remain before the Licensing Board – the two petitions addressed in this Response, and seven other petitions, which are addressed in a separate response (*See n. 3, supra*).

DISCUSSION

¹⁵ See (1) “Memorandum and Order (Denying the Village of Buchanan’s Hearing Request and Petition to Intervene),” dated December 5, 2007; (2) “Memorandum and Order (Denying the New York Affordable Reliable Electricity Alliance’s Petition to Intervene),” dated December 12, 2007; and (3) “Memorandum and Order (Denying the City of New York’s Petition for Leave to Intervene),” dated December 12, 2007.

I. Standing to Intervene

A. Applicable Legal Requirements

In accordance with the Commission's Rules of Practice,¹⁶ "[a]ny person¹⁷ whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or petition for leave to intervene and a specification of the contentions that the person seeks to have litigated in the hearing." 10 C.F.R. § 2.309(a). The regulations further provide that the Licensing Board "will grant the request/petition if it determines that the requestor/petitioner has standing under the provisions of [10 C.F.R. § 2.309(d)] and has proposed at least one admissible contention that meets the requirements of [10 C.F.R. § 2.309(f)]." *Id.*

Under the general standing requirements set forth in 10 C.F.R. § 2.309(d)(1), a request for hearing or petition for leave to intervene must state:

- (i) The name, address and telephone number of the requestor or petitioner;
- (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.

10 C.F.R. § 2.309(d)(1). Any state, local governmental body (county, municipality or other subdivision), or any affected Federally-recognized Indian Tribe that desires to participate as a

¹⁶ See "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," 10 C.F.R. Part 2.

¹⁷ "Person" means ("1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission . . . ; any State or any political subdivision of, or any political entity within a state, any foreign government or nation . . . , or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing." 10 C.F.R. § 2.4.

party in a proceeding, other than those with a facility located within its boundaries, must submit a request for hearing/petition to intervene that meets the requirements of 10 C.F.R. § 2.309. 10 C.F.R. § 2.309(d)(2)(i).¹⁸ If a state, local governmental body or affected Federally-recognized Indian Tribe wishes to be a party in a proceeding for a facility located within its boundaries, it need not address the standing requirements under this paragraph. *Id.* In either scenario, the state, local governmental body, and/or affected Federally-recognized Indian Tribe shall, in its request/petition, each designate a single representative for the hearing. *Id.* Finally, the regulations state that the Commission, presiding officer or Licensing Board “will determine whether the petitioner has an interest affected by the proceeding considering the factors enumerated in § 2.309(d)(1)-(2), among other things.” 10 C.F.R. § 2.309(d)(3).¹⁹

As the Commission has observed, “[a]t the heart of the standing inquiry is whether the petitioner has ‘alleged such a personal stake in the outcome of the controversy’ as to demonstrate that a concrete adverseness exists which will sharpen the presentation of issues.” *Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site)*, CLI-94-12, 40 NRC 64, 71 (1994), *citing Duke Power Co. v. Carolina Environmental Study Group, Inc.*, 438 U.S. 59, 72 (1978) and quoting *Baker v. Carr*, 369 U.S. 186, 204 (1962). The Commission stated:

To demonstrate such a “personal stake”, the Commission applies contemporaneous judicial concepts of standing. Accordingly, a

¹⁸ Pursuant to 10 C.F.R. § 2.315(c), “an interested State, local governmental body (county, municipality or other subdivision), and affected, Federally-recognized Indian Tribe, which has not been admitted as a party under § 2.309,” is to be afforded “a reasonable opportunity to participate” in any hearing, in the manner stated therein. In that event, the governmental representative is to “identify those contentions on which it will participate in advance of any hearing held.” *Id.*

¹⁹ The presiding officer may also consider a request for discretionary intervention in the event that a petitioner is determined to lack standing to intervene as a matter of right, where a sufficient showing is made with respect to the factors enumerated in the rule. See 10 C.F.R. § 2.309(e).

petitioner must (1) allege an “injury in fact” that is (2) “fairly traceable to the challenged action” and (3) is “likely” to be “redressed by a favorable decision.”

Id., citing *Lujan v. Defenders of Wildlife*, 112 S.Ct. 2130, 2136 (1992), and *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993). See also *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999).

In license renewal proceedings, standing to intervene has been found to exist based upon a proximity presumption. See, e.g., *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 271 (2006); *AmerGen Energy Co. LLC* (Oyster Creek Nuclear Generating Station), LBP-06-07, 63 NRC 188, 196-197 (2006); *Florida Power and Light Co.* (Turkey Point, Units 3 and 4), LBP-01-06, 53 NRC 138, 150 (2001), *aff'd on other grounds*, CLI-01-17, 54 NRC 3 (2001). The proximity presumption establishes standing without the need to establish the elements of injury, causation, or redressability. *Turkey Point*, LBP-01-06, 53 NRC at 150 (2001). In reactor license proceedings, Licensing Boards have typically applied the proximity presumption to persons “who reside or frequent the area with a 50-mile radius” of the plant in question. See, e.g., *id.* at 148.²⁰

An organization may establish its standing to intervene based on organizational standing (showing that its own organizational interests could be adversely affected by the proceeding), or

²⁰ The Commission has not yet ruled specifically on the whether proximity alone is sufficient to establish standing in a license renewal proceeding. See *Florida Power and Light Co.* (Turkey Point, Units 3 and 4), CLI-01-17, CLI-01-17, 54 NRC 3, 20 n.20 (2001); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2 and 3) CLI-99-11, 49 NRC 328, 333 n.2 (1999).

representational standing (based on the standing of its members). Where an organization seeks to establish "representational standing," it must show that at least one of its members may be affected by the proceeding, it must identify that member by name and address, and it must show that the member "has authorized the organization to represent him or her and to request a hearing on his or her behalf." See, e.g., *Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 409 (2007); *Oyster Creek*, LBP-06-07, 63 NRC at 195 (2006), citing *GPU Nuclear Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 192, 202 (2000). Further, for the organization to establish representational standing the member seeking representation must qualify for standing in his or her own right; the interests that the organization seeks to protect must be germane to its own purpose; and neither the asserted claim nor the requested relief must require an individual member to participate in the organization's legal action. *Id.*; *PFS*, CLI-99-10, 49 NRC at 323, citing *Hunt v. Washington State Apple Advertising Comm'n*, 432 U.S. 333, 343 (1977).

B. The Petitioners' Standing to Intervene

1. Petitioners Represented in the PHASE Petition

Four organizations and one individual (Assemblyman Brodsky) have joined in sponsoring the PHASE Petition. The standing of each of these petitioners to intervene in this proceeding is addressed *seriatim* in the discussion below.

(a) WestCAN

In its Petition, WestCAN seeks to establish both organizational and representational standing to intervene. WestCAN states that its offices and material archives are located in Cortland Manor, NY, which is within three miles of Indian Point; it further states that it is concerned that a radiological release from Indian Point could adversely affect the value of its property and its ability to conduct business. PHASE Petition at [unnumbered] 3-4, 7-8. In

addition, WestCAN identifies six of its members, who filed Declarations in which they state their home addresses, their activities in the area, their concerns regarding license renewal of Indian Point Units 2 and 3, and that WestCAN “represents” their interests in this proceeding.²¹

The Declarations submitted by WestCAN demonstrate that its members have individual standing to intervene, and that it has been authorized to represent those members in this proceeding. WestCAN’s Declarations establish that these persons live within approximately 3 to 16 miles from Indian Point, conduct activities near the facility, and have health and safety concerns related to operation under a renewed license. Accordingly, each of these persons would have standing in his or her own right to intervene in this proceeding, based on the proximity presumption. Further, these individuals state that WestCAN represents their interests in this proceeding, thus implying that they have authorized WestCAN to do so. Accordingly, WestCAN has established its representational standing to intervene in this proceeding.²²

(b) RCCA

RCCA seeks to establish both organizational and representational standing to intervene. RCCA states that its “central office and material archives are located in Pomona, NY, which is within nine miles of Indian Point,” and that its “meeting place” is at the Pomona Village Hall,

²¹ See Declarations of WestCAN members Marilyn Elie (PHASE Exhibit A), Mark Jacobs (PHASE Exhibit D), Gary T. Shaw (PHASE Exhibit E), Jeanne D. Shaw (PHASE Exhibit F), Judy Allen (PHASE Exhibit G), and Elizabeth C. Segal (PHASE Exhibit H).

²² WestCAN’s organizational standing to intervene in this proceeding is less clear. While it identifies its office address and states that it maintains “material archives” there, it does not provide a clear explanation of the nature of those archives or its property or other interests. Nonetheless, inasmuch as WestCAN has established representational standing to intervene, its organizational standing need not be addressed. Similarly, WestCAN seeks discretionary intervention in the event it is found to lack standing to intervene as of right, PHASE Petition at [unnumbered] 8-9; inasmuch as WestCAN has established its standing to intervene, its arguments concerning discretionary intervention need not be addressed.

located on Camp Hill Road in Pomona, NY. PHASE Petition at [unnumbered] 4, 9. RCCA states that it is concerned that a radiological release from Indian Point could adversely affect the value of its property and its ability to conduct business. *Id.* at [unnumbered] 9-10. In addition, RCCA identifies four of its members, who filed Declarations in which they state their home addresses, their activities in the area, and their concerns regarding license renewal of Indian Point Units 2 and 3;²³ three of those persons (Ms. Coker, Ms. Burnet and Mr. Stewart) further state that RCCA “represents” their interests in this proceeding.

The Declarations submitted by RCCA demonstrate that its members have individual standing to intervene, and that it has been authorized to represent those members in this proceeding. RCCA’s Declarations establish that these persons live within approximately 11 to 13 miles from Indian Point, conduct activities near the facility, and have health and safety concerns related to operation under a renewed license. Accordingly, these persons would have standing in their own right to intervene in this proceeding, based on the proximity presumption. Further, three of these individuals state that RCCA represents their interests in this proceeding, thus implying that they have authorized RCCA to do so. Accordingly, RCCA has established its representational standing to intervene in this proceeding.²⁴

²³ See Declarations of RCCA members Connie L. Coker (PHASE Exhibit AAA), Janet Lee Burnet (PHASE Exhibit BBB), Andrew Y. Stewart (PHASE Exhibit CCC), and Dorice Madronero (PHASE Exhibit III). In addition, RCCA filed a second Declaration by Ms. Madronero, executed in her capacity as President of RCCA (PHASE Exhibit B).

²⁴ RCCA has not, however, established its organizational standing to intervene in this proceeding. While RCCA states that its “central office” is located in Pomona, NY, it provides only a Post Office Box address. See PHASE Exhibit B. The fact that it meets in the Pomona Village Hall does not establish that it has any property or other interests at that location; further, while it states that it possesses “material archives,” it does explain what those archives are or where they are located. Nonetheless, inasmuch as RCCA has established representational standing to intervene, its organizational standing need not be addressed. Similarly, its request for discretionary intervention (see PHASE Petition at [unnumbered] 10) need not be (continued. . .)

(c) PHASE

In its Petition, PHASE seeks to establish both organizational and representational standing to intervene. PHASE states that its central office and material archives are located at 21 Perlman Drive in Spring Valley, NY, which is within 11 miles of Indian Point; it further states that it is concerned that a radiological release from Indian Point could adversely affect the value of its property and its ability to conduct business. PHASE Petition at [unnumbered] 5, 11. In addition, PHASE identifies four of its members, who filed Declarations in which they state their home addresses, their activities in the area, their concerns regarding license renewal of Indian Point Units 2 and 3, and that PHASE “represents” their interests in this proceeding.²⁵

The Declarations submitted by PHASE demonstrate that its members have individual standing to intervene, and that it has been authorized to represent those members in this proceeding. PHASE’s Declarations establish that these persons live within approximately 10 to 20 miles from Indian Point, conduct activities near the facility, and have health and safety concerns related to operation under a renewed license. Accordingly, these persons would have standing in their own right to intervene in this proceeding, based on the proximity presumption. Further, these individuals state that PHASE represents their interests in this proceeding, thus implying that they have authorized PHASE to do so. Accordingly, PHASE has established its representational standing to intervene in this proceeding.²⁶

(. . .continued)

addressed, inasmuch as it has shown representational standing to intervene as of right.

²⁵ See Declarations of PHASE members Michel Lee (PHASE Exhibit DDD), Susan H. Shapiro (PHASE Exhibit EEE), Robert A. Jones (PHASE Exhibit FFF), and Maureen G. Ritter (PHASE Exhibit GGG).

²⁶ PHASE’s organizational standing to intervene in this proceeding is less clear. While it identifies its (continued. . .)

(d) The Sierra Club – Atlantic Chapter

The Sierra Club seeks to establish both organizational and representational standing to intervene, asserting that it “as [sic] standing on its own behalf and on behalf of its members.” PHASE Petition at [unnumbered] 5. The Sierra Club’s request, however, differs from that of WestCAN, RCCA and PHASE. While it claims that it has members who live, work, and recreate “within two to fifty miles of Indian Point,” PHASE Petition at [unnumbered] 6, it fails to identify any such persons – and it has failed to provide any affidavits or declarations by its members showing that they have individual standing to intervene and have authorized the Sierra Club to represent them in this proceeding. Thus, the Sierra Club has failed to show any basis for its claim of representational standing to intervene in this proceeding.

With respect to its claim of organizational standing, the Sierra Club states that its “central office is located at 353 Hamilton Street, Albany, NY, 12210,” *Id.* at [unnumbered] 6; that it has “material archives dating back to 1892,” *Id.* at [unnumbered] 12; and that the “Sierra Club’s regional chapters have offices in New York City, Dobbs Ferry and Nyack, all located in the Hudson Valley, within the Peak Ingestion Pathway.” *Id.* at [unnumbered] 13. The Sierra Club further states that it is concerned that a radiological release from the facility during the license renewal term could result in contamination that would disrupt and damage its operations and the residences of its members. The Sierra Club attached the Declaration of Susan Lawrence,

(. . .continued)

office address and states that it maintains “material archives” there, it does not provide a clear explanation of the nature of those archives or its property or other interests. Nonetheless, inasmuch as PHASE has established representational standing to intervene, its organizational standing need not be addressed. Similarly, PHASE’s request for discretionary intervention (PHASE Petition at [unnumbered] 11-12) need not be addressed, inasmuch as PHASE has shown its representational standing to intervene.

Conservation Chair for the Sierra Club, Atlantic Chapter (executed in Albany, NY), in which she describes various health and safety and environmental concerns regarding the issuance of a renewed license in this proceeding.²⁷

The Sierra Club has failed to establish its organizational standing to intervene in this proceeding. The location of its central office, in Albany, NY, is approximately 110 miles from the Indian Point facility. While it states that its “regional chapters” are located in New York City, Dobbs Ferry and Nyack, NY, it fails to provide a street address for those offices, fails to describe the nature of its operations or activities at those locations, and fails to describe the nature of its interests there which could be adversely affected by issuance of a renewed license for Indian Point Units 2 and 3. Thus, it has not shown that it should be granted organizational standing based on the “proximity” presumption.

Standing in NRC adjudications is governed by judicial concepts of standing. *See, e.g., PFS*, CLI-99-10, 49 NRC at 322-23. A Petitioner must demonstrate that it has suffered a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute; that the injury can fairly be traced to the challenged action; and that the injury is likely to be redressed by a favorable decision. *See, e.g., Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 103-04 (1998). Here, neither Ms. Lawrence’s Declaration nor the Petition itself describes the organizations interests or an injury which the organization will suffer should the NRC renew Indian Point’s operating license. Rather, the Sierra Club has offered only a few generalized statements that Indian Point has been leaking

²⁷ See “Declaration of Sierra Club Atlantic Chapter,” signed by Susan Lawrence on December 5, 2007 (PHASE Exhibit C).

radioactive materials into the Hudson River, that an accident could result in contamination, that the evacuation plan is inadequate, that terrorists could attack the plant, and that the plant is sited too close to a densely populated region and on an earthquake fault. PHASE Exhibit C. These assertions fail to establish any harm to the Sierra Club's interests, and constitute little more than a generalized discussion of its concerns with relicensing -- that just as easily could have been submitted by any person or organization, located anywhere in the world. These statements fail to establish the Sierra Club's standing to intervene in this proceeding as of right.

Finally, the Sierra Club included in its Petition a request that it be granted discretionary intervention. PHASE Petition at [unnumbered] 13. In this regard, the Licensing Board may consider a petitioner's request to be afforded discretionary intervention if at least one other petitioner has been found to have standing to intervene and has filed an admissible contention. In that event, the following factors, specified in 10 C.F.R. § 2.309(e), must be addressed in the petition, and are to be considered and balanced by the Board:

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

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

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

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

(2) Factors weighing against allowing intervention--

(i) The availability of other means whereby the requestor's/petitioner's interest will be protected;

(ii) The extent to which the requestor's/petitioner's interest will be represented by existing parties; and

(iii) The extent to which the requestor's/petitioner's participation will inappropriately broaden the issues or delay the proceeding.

As the Commission has stated, discretionary intervention is “an extraordinary procedure” that has rarely been granted in NRC proceedings – in fact, no requests for discretionary intervention were granted in a 12-year period prior to 2006, and only eight such requests were ever granted (without reversal) in the 30 years that the NRC has applied the factors in 10 C.F.R §2.309(e). *In the Matter of Andrew Siemaszko*, CLI-06-16, 63 NRC 708, 716-17 (2006).

Here, the Sierra Club has failed to show that a balancing of the considerations specified in 10 C.F.R. § 2.309(e) supports its request that it be afforded the “extraordinary” grant of discretionary intervention. The Sierra Club asserts – copying almost *verbatim* the assertions made by WestCAN, RCCA and PHASE – that its participation may reasonably be expected to assist in developing a sound record, since it is “well versed in the field of nuclear energy and safety” and “its constituency represents members who have participated in numerous [NRC] proceedings and public meetings.” *Id.* Further, it states that its interests include “its members’ property interests” as well as “the public interest,” and that it is a member of “the Indian Point Safe Energy Coalition, a broad coalition of 70 other free standing organizations.” *Id.* at [unnumbered] 13-14. Finally, the Sierra Club states that it “can provide local insight,” since its members are Indian Point’s neighbors, and that this proceeding could have a “significant affect [sic] on PHASE and its members.” *Id.* at [unnumbered] 14; emphasis added.

These *pro forma* assertions fail to demonstrate that the Sierra Club should be afforded discretionary standing to intervene in this proceeding. Apart from its *ipse dixit* assertion that it is “well versed in the filed of nuclear energy and safety,” and that some unspecified members have participated in other NRC proceedings, the Sierra Club completely fails to identify any special

expertise that it may have, or the identity of any experts or other persons who may be expected to assist in the development of a sound record, as required by § 2.309(e)(1)(i). Further, it has failed to identify any of its own or its members' "property, financial or other interests in the proceeding," as required by § 2.309(e)(1)(ii); and it has failed to explain the possible effect of any decision or order that may be issued in the proceeding on its interest, as required by § 2.309(e)(1)(iii). Finally, the Sierra Club has altogether failed to address the three factors recited in § 2.309(e)(2) – *i.e.*, it has not provided any discussion of (i) whether other means are available to protect its interest, (ii) the extent to which its interest will be represented by other parties – such as its fellow Petitioners WestCAN, RCCA and PHASE, or the New York Attorney General, all of whom appear to share its concerns, or (iii) the extent to which its participation will inappropriately broaden the issues or delay the proceeding. Accordingly, the Sierra Club has failed to show that it warrants the extraordinary grant of discretionary intervention.

For all of the above reasons, the Sierra Club's petition to intervene should be denied.

(e) Assemblyman Richard L. Brodsky

Assemblyman Richard Brodsky states that he represents New York State's 92nd Assembly District in the New York State Assembly, and that he seeks to intervene in this proceeding. However, while he provides his office address in Elmsford, NY (which appears to be located approximately 20 miles from Indian Point), he fails to identify the location of his personal residence, any property he may own in the vicinity of the facility, or any other interests he may have that could be adversely affected by this proceeding.²⁸ Further, he does not state

²⁸ The Petition refers to a Declaration by Mr. Brodsky, designated as Exhibit LLL. See PHASE Petition at [unnumbered] 14. However, no such exhibit was provided by the Petitioners, and no Declaration by Mr. Brodsky appears to have been submitted.

whether he seeks to intervene in his individual capacity or as a representative for any other persons. In sum, contrary to the requirements of 10 C.F.R. § 2.309(d), he fails to describe the nature of his right to participate in the proceeding; the nature or extent of his interests that could be affected by the proceeding; and the possible effect that a decision in the proceeding may have on his interests. He has therefore failed to establish his standing to intervene in this matter as of right.

Similarly, Mr. Brodsky requests that he be granted discretionary intervention, but – like the Sierra Club -- he fails to satisfy the standards set forth in 10 C.F.R. § 2.309(e). In this regard, he repeats the *pro forma* assertions made by the Sierra Club, WestCAN, RCCA and PHASE, PHASE Petition at [unnumbered] 15-16. To those generalized statements he adds an assertion that he personally “has participated in numerous [NRC] proceedings and public meetings”; he describes his committee chairmanship in the NY State Assembly; and he identifies the towns that he represents in the State Assembly. *Id.* at [unnumbered] 15.

The requirements for discretionary standing to intervene are addressed *supra*, in the Staff’s response to the Sierra Club’s request for discretionary intervention. Inasmuch as Mr. Brodsky’s request essentially reiterates, with very little modification, the Sierra Club’s assertions, the Staff herein incorporates by reference its response to the Sierra Club’s request for discretionary intervention. For the reasons set forth above concerning the Sierra Club, the Staff submits that Assemblyman Brodsky has not shown that a balancing of the factors specified in 10 C.F.R. § 2.309(e) supports his request that he be afforded the “extraordinary” grant of discretionary intervention. *Andrew Siemaszko*, CLI-06-16, 63 NRC at 716-17.

Finally, the Staff notes that Mr. Brodsky added his name to the combined petition of PHASE, WestCAN, RCCA, and the Sierra Club, thereby petitioning for leave to intervene, after the November 30, 2007 deadline for petitions had passed; further, Mr. Brodsky did so after

having filed an untimely request for an extension of time to file his petition,²⁹ which the Licensing Board has denied.³⁰ Accordingly, apart from his failure to establish his standing to intervene as of right or as a matter of discretion, Mr. Brodsky's petition should be denied as having been filed late in contravention of the Licensing Board's Order denying his request for an extension of time. Further, 10 C.F.R. § 2.309(c)(1) provides that a nontimely petition "will not be entertained" absent a determination that good cause and the other factors specified in § 2.309(c)(1) support the untimely filing. Mr. Brodsky has not addressed those factors, and he has not shown that a balancing of those factors warrants that his untimely request for leave to intervene should be granted.

In sum, Mr. Brodsky has not demonstrated his standing to intervene, and he filed his petition late, in direct contravention of the Licensing Board's Order denying his request for an extension of time, and without showing that a balancing of the factors specified in 10 C.F.R. § 2.309(c)(1) support the grant of his petition. His petition to intervene should therefore be denied.³¹

2. FUSE

FUSE asserts that it has standing to intervene as a matter of right (i.e., organizational standing) and representational standing based on the standing of its members. FUSE Petition

²⁹ See Letter from Assemblyman Richard L. Brodsky to the Licensing Board, dated December 4, 2007 ("Re: Request for Extension of Time to File Formal Requests for Hearing and Petitions to Intervene with Contentions").

³⁰ See "Order (Denying Assemblyman Richard L. Brodsky's Request for an Extension)," dated December 13, 2007.

³¹ The Staff does not object to Mr. Brodsky's participation in this proceeding as a representative of WestCAN, PHASE, RCCA, and/or the Sierra Club, if those organizations are admitted as parties herein.

at 34-37. Alternatively, FUSE contends that it should be granted discretionary intervention pursuant to 10 C.F.R. § 2.309(e). *Id.* at 34-35.³²

An organization seeking to establish organizational standing must demonstrate a palpable injury in fact to its organizational interests that is within the zone of interests protected by the AEA or the NEPA. See *Yankee Atomic Elec. Co.* (Yankee Nuclear Power Station), CLI-94-3, 39 NRC 95, 102 n.1 0 (1994); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), ALAB-952, 33 NRC 521, 528-30 (1991). As a basis for organizational standing, FUSE stated that its office is located three miles from Indian Point (in the home of FUSE Director Sherwood Martinelli), and that its office “houses” FUSE’s records, archives, technical book collection, furnishings, and equipment. FUSE Petition at 33-34. FUSE states that it seeks to participate in this proceeding because it is concerned that contamination resulting from a radiological release at Indian Point could impact the value of its property and interfere with its operations; further, FUSE identifies concerns regarding the impacts on health, safety, and economic consequences of relicensing Indian Point for an additional twenty years. *Id.* at 34. These assertions appear sufficient to demonstrate FUSE’s organizational standing to intervene.³³

³² FUSE’s request for discretionary intervention repeats the same assertions that were made by the five petitioners represented in the PHASE Petition. See FUSE Petition at 34-35. Pursuant to 10 C.F.R. § 2.309(e), a petitioner seeking discretionary intervention must address six factors in his or her petition to intervene. FUSE addresses only three of the factors specified in § 2.309(e), and fails to establish that it should be granted discretionary intervention. For the reasons stated above with respect to the PHASE Petitioners, FUSE’s request for discretionary intervention should be denied.

³³ As required, FUSE has designated the persons it authorizes to represent it in this proceeding, following the ban on Mr. Martinelli’s participation as its representative herein. FUSE named John LeKay as its lead representative, and Heather Ellsworth Burns-DeMelo, Remy Chevalier, Bill Thomas, and Belinda J. Jaques as additional representatives. FUSE Petition at 1.

FUSE also seeks to establish representational standing. To demonstrate standing based on the interests of its members, a group must show that the licensing action it challenges may injure the group or someone the group is authorized to represent. *Int'l Uranium (USA) Corp.* (White Mesa Uranium Mill), LBP-97-14, 46 NRC 55, 56 (1997). The organization must identify at least one member by name and address, demonstrate how that member's interests may be affected, and show that the group is authorized to request a hearing on behalf of that member. *Yankee Rowe*, LBP-98-12, 47 NRC at 354-55.

Although FUSE seeks to represent its members' interests in this proceeding, it has not satisfied all of the requirements to establish its representational standing to intervene – although the Staff believes this defect may be readily cured. In its Petition, FUSE does not identify the names and addresses of any members who have authorized FUSE to represent them in this proceeding, nor has it identified their interests or explained how their interests could be affected by the proceeding. While FUSE does identify the names and addresses of five of its members (Mr. LeKay and FUSE's other representatives), and states that they live, work, and recreate within 50 miles of Indian Point, FUSE does not explicitly state that it is authorized to represent them in this proceeding. See FUSE Petition at 33. Similarly, an examination of their individual Declarations (FUSE Exhibits 81-85) reveals that they identified the location of their homes, and described their interests and the manner in which their interests could be affected by this proceeding – but they did not state that they authorize FUSE to represent them herein.³⁴

³⁴ In support of its Petition, FUSE filed a DVD disc containing numerous exhibits, including a set of previously filed exhibits labeled "Tip of the Spear" ("Tip Exhibits"), which had been filed in support of a previous version of FUSE's Petition. Included among those exhibits are eight Declarations, executed in September 2007 and filed in support of FUSE's earlier petition. See Tip Exhibits A – H. These included the Declarations of Susan Shapiro (Tip Exhibit A), Sherwood Martinelli (Tip Exhibit B), Julie Gottesman (Tip Exhibit C), Gary Shaw (Tip Exhibit D), Andrew Stewart (Tip Exhibit E), Timothy Englert (Tip Exhibit (continued. . .))

While the defect described above may be readily cured by FUSE, the Staff does not support such action. Both the Staff and the Applicant have moved to strike FUSE's Petition and dismiss it as a participant in this proceeding, based on its repeated disregard of the Commission's and Licensing Board's explicit instructions and the filing and service requirements in 10 C.F.R. Part 2. See n. 5, *supra*. The Staff believes that FUSE's egregious conduct warrants that its Petition be dismissed, for the reasons stated in the motions to strike. Accordingly, regardless of whether FUSE has established its standing to intervene, the Staff opposes its Petition and recommends that its request to intervene be denied.

II. The Admissibility of Petitioners' Proffered Contentions

A. Legal Requirements for Contentions

1. General Requirements.

The legal requirements governing the admissibility of contentions are well established, and currently are set forth in 10 C.F.R. § 2.309(f) of the Commission's Rules of Practice

(. . .continued)

F), Jeanne Shaw (Tip Exhibit G), and Robert A. Jones (Tip Exhibit H). Each of them identified their residences and other interests, and generally described how their interests could be adversely affected by this proceeding. Six of those persons (everyone except Ms. Shapiro and Mr. Martinelli) stated that FUSE represents them in this proceeding. Since then, however, Ms. Shapiro and others have resigned from FUSE; and most of the Declarants have filed more recent Declarations stating that other organizations represent them in the proceeding (Gary and Jeanne Shaw are now represented by WestCAN, Andrew Stewart is represented by RCCA, and Robert Jones and Susan Shapiro are represented by PHASE). Only Mr. Martinelli, Ms. Gottesman and Mr. Englert have not submitted new declarations – and it is altogether uncertain whether Ms. Gottesman and Mr. Englert continue to authorize FUSE to represent them in the proceeding, nor has FUSE clarified whether their September 2007 Declarations may be relied upon. As for Mr. Martinelli, he has not explicitly authorized FUSE to represent him, and since he is barred from filing documents in the proceeding, any further Declaration by him is prohibited.

(formerly § 2.714(b)).³⁵ Specifically, in order to be admitted, a contention must satisfy the following requirements:

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

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

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

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

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

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

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental

³⁵ These requirements substantially reiterate the requirements stated in former § 2.714, published in revised form in 1989. See Statement of Consideration, "Rules of Practice for Domestic Licensing Proceedings - Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168 (Aug. 11, 1989), as *corrected*, 54 Fed. Reg. 39,728 (Sept. 28, 1989). Further, while § 2.714 was revised in 1989, those revisions did not constitute "a substantial departure" from then existing practice in licensing cases. 54 Fed. Reg. at 33,170-71; see also, *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-94-11, 39 NRC 205, 207 (1994). Thus, while the 1989 amendments superseded, in part, the prior standards governing the admissibility of contentions, those standards otherwise remained in effect to the extent they did not conflict with the 1989 amendments. *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), LBP-91-19, 33 NRC 397, 400 (1991).

report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

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

10 C.F.R. § 2.309(f)(1)-(2).³⁶

The Licensing Board in this proceeding has previously addressed these standards at length, in its Orders denying certain petitions to intervene for failure to state an admissible contention.³⁷ The Licensing Board summarized the standards in 10 C.F.R. § 2.309(f)(1), as follows:

An admissible contention must: (1) provide a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised is within the scope of the proceeding;

³⁶ Similarly, long-standing Commission precedent establishes that contentions may only be admitted in an NRC licensing proceeding if they fall within the scope of issues set forth in the *Federal Register* notice of hearing and comply with the requirements of former § 2.714(b) (subsequently restated in § 2.309(f)), and applicable Commission case law. See, e.g., *Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976); *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974); *Duquesne Light Co.* (Beaver Valley Power Station, Unit 1), ALAB-109, 6 AEC 243, 245 (1973); *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-107, 6 AEC 188, 194 (1973), *aff'd sub nom. BPI v. Atomic Energy Commission*, 502 F.2d 424, 429 (D.C. Cir. 1974).

³⁷ See (1) Memorandum and Order (Denying the City of New York's Petition for Leave to Intervene), issued December 12, 2007, at 2-8; (2) Memorandum and Order (Denying the New York Affordable Reliable Electricity Alliance's Petition to Intervene), issued December 12, 2007, at 3-8; and (3) Memorandum and Order (Denying the Village of Buchanan's Hearing Request and Petition to Intervene), issued December 5, 2007, at 8.

(4) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (5) provide 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 the hearing; and (6) provide sufficient information to show 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.

Memorandum and Order (Denying the Village of Buchanan's Hearing Request and Petition to Intervene) (Dec. 5, 2007), slip op. at 3; footnote omitted. As the Licensing Board further observed, sound legal and policy considerations underlie the Commission's contention requirements:

The purpose of the contention rule is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." The Commission has stated that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing." The Commission has emphasized that the rules on contention admissibility are "strict by design." Failure to comply with any of these requirements is grounds for the dismissal of a contention.

Id. at 4; footnotes omitted. ³⁸

³⁸ See also *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), CLI-91-12, 34 NRC 149, 155 (1991); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-35, 34 NRC 163, 167-68 (1991) These requirements are intended, inter alia, to ensure that a petitioner reviews the application and supporting documentation prior to filing contentions; that the contention is supported by at least some facts or expert opinion known to the petitioner at the time of filing; and that there exists a genuine dispute between the petitioner and the applicant before a contention is admitted for litigation -- so as to avoid the practice of filing contentions which lack any factual support and seeking to flesh them out later through discovery. See, e.g., *Shoreham*, 34 NRC at 167-68.

The requirements governing the admissibility of contentions have been strictly applied in NRC adjudicatory proceedings, including license renewal proceedings. For example, in a recent decision involving license renewal, the Commission stated:

To intervene in a Commission proceeding, including a license renewal proceeding, a person must file a petition for leave to intervene. In accordance with 10 C.F.R. § 2.309(a), this petition must demonstrate standing under 10 C.F.R. § 2.309(d), and must proffer at least one admissible contention as required by 10 C.F.R. §§ 2.309(f)(1)(i)-(vi). The requirements for admissibility set out in 10 C.F.R. §§ 2.309(f)(1)(i)-(vi) are "strict by design," and we will reject any contention that does not satisfy these requirements. Our rules require "a clear statement as to the basis for the contentions and the submission of . . . supporting information and references to specific documents and sources that establish the validity of the contention." "Mere 'notice pleading' does not suffice." Contentions must fall within the scope of the proceeding – here, license renewal – in which intervention is sought.

Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118-119 (2006); footnotes omitted; emphasis added.

Finally, it is well established that the purpose for the basis requirements is (1) to assure that the contention raises a matter appropriate for adjudication in a particular proceeding; (2) to establish a sufficient foundation for the contention to warrant further inquiry into the assertion; and (3) to put other parties sufficiently on notice of the issues so that they will know generally what they will have to defend against or oppose. *Peach Bottom, supra*, 8 AEC at 20-21; *Palo Verde, supra*, LBP-91-19, 33 NRC at 400. The *Peach Bottom* decision requires that a contention be rejected if:

- (1) it constitutes an attack on applicable statutory requirements;
- (2) it challenges the basic structure of the Commission's regulatory process or is an attack on the regulations;
- (3) it is nothing more than a generalization regarding the petitioner's view of what applicable policies ought to be;

(4) it seeks to raise an issue which is not proper for adjudication in the proceeding or does not apply to the facility in question; or

(5) it seeks to raise an issue which is not concrete or litigable.

Peach Bottom, supra, 8 AEC at 20-21.

2. Scope of License Renewal Proceedings

The scope of a license renewal proceeding is limited, under the Commission's regulations in 10 C.F.R. Part 54,³⁹ to the specific matters that must be considered for the license renewal application to be granted. Pursuant to 10 C.F.R. § 54.29, the following standards are considered in determining whether to grant a license renewal application:

10 C.F.R. § 54.29 Standards for issuance of a renewed license:

A renewed license may be issued by the Commission up to the full term authorized by § 54.31 if the Commission finds that:

(a) Actions have been identified and have been or will be taken with respect to the matters identified in Paragraphs (a)(1) and (a)(2) of this section, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB, and that any changes made to the plant's CLB in order to comply with this paragraph are in accord with the Act and the Commission's regulations. These matters are:

(1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1); and

(2) time-limited aging analyses that have been identified to require review under § 54.21(c).

³⁹ See generally, Statement of Consideration, "Nuclear Power Plant License Renewal," 56 Fed. Reg. 64,943 (Dec. 13, 1991) (hereinafter referred to "1991 Statement of Consideration"); Statement of Consideration, "Nuclear Power Plant License Renewal; Revisions," 60 Fed. Reg. 22,461 (May 8, 1995) (hereinafter referred to "1995 Statement of Consideration").

(b) Any applicable requirements of Subpart A of 10 CFR Part 51 have been satisfied.

(c) Any matters raised under § 2.335 have been addressed.

These standards, along with other regulations in 10 C.F.R. Part 54, and the environmental regulations related to license renewal set forth in 10 C.F.R. Part 51 and Appendix B thereto, establish the scope of issues that may be considered in a license renewal proceeding. The failure of a proposed contention to demonstrate that an issue is within the scope of the proceeding is grounds for its dismissal. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 567 (2005).

The Commission has provided guidance for license renewal adjudications regarding what safety and environmental issues fall within or beyond its license renewal requirements. See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3, 6 (2001). Specifically, the NRC conducts a technical review pursuant to 10 C.F.R. Part 54, to assure that pertinent public health and safety requirements have been satisfied. *Turkey Point*, CLI-01-17, 54 NRC at 6. In addition, the NRC performs an environmental review pursuant to 10 C.F.R. Part 51 to assess the potential impacts of twenty additional years of operation. *Id.* at 6-7. Regardless of whether or not a license renewal application has been filed for a facility, the Commission has a continuing responsibility to oversee the safety and security of ongoing plant operations, and it routinely oversees a broad range of operating issues under its statutory responsibility to assure the protection of public health and safety for operations under existing operating licenses. Therefore, for license renewal, the Commission has found it unnecessary to include a review of issues already monitored and reviewed in ongoing regulatory oversight processes. *Id.* at 8-10.

The Commission has clearly indicated that its license renewal safety review focuses on “plant systems, structures, and components for which current [regulatory] activities and requirements *may not* be sufficient to manage the effects of aging in the period of extended operation.” *Id.* at 10, *quoting* 60 Fed. Reg. at 22,469. Further, the Commission stated that: “Adjudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review; for our hearing process (like our Staff’s review) necessarily examines only the [safety] questions our safety rules make pertinent.” *Id.* at 10.

Similarly, the Commission has expressly held that “license renewal is not a forum for considering emergency-planning issues”; to the contrary, “emergency planning issues fall outside the scope of [a] license renewal proceeding.” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 565, 567 (2005). Moreover, as the Commission has explained, “[i]ssues like emergency planning – which already are the focus of ongoing regulatory processes – do not come within the NRC’s safety review at the license renewal stage.” *Turkey Point*, CLI-01-17, 54 NRC at 10.⁴⁰ In this regard, it should be noted that no finding under 10 C.F.R. § 50.47 (“Emergency Plans”) is necessary for issuance of a renewed nuclear power reactor operating license. As the Commission has explained, “[i]ssues like emergency planning – which already are the focus of ongoing regulatory processes – do not come within the NRC’s safety review at the license renewal stage.” *Turkey Point*, CLI-01-17, 54 NRC at 10.

⁴⁰ Further, inasmuch as emergency planning concerns fall outside the scope of a license renewal proceeding and can not be redressed in the proceeding, they fail to establish a petitioner’s standing to intervene. *Millstone*, CLI-05-24, 62 NRC at 565.

Further, as pertinent here, the Commission recently reiterated that terrorism-related National Environmental Policy Act (NEPA) contentions are not admissible in a license renewal proceeding. *Amergen Energy Co. LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124 (2007), *aff'g* LBP-06-7, 63 NRC 188 (2006). In that proceeding, the Commission held as follows:

Today, notwithstanding a recent decision by the United States Court of Appeals for the Ninth Circuit, holding that the NRC may not exclude NEPA-terrorism contentions categorically, we reiterate our longstanding view that NEPA demands no terrorism inquiry. We also point out that, for license renewal, the NRC has in fact examined terrorism under NEPA and found the impacts similar to the impacts of already-analyzed severe reactor accidents. Hence, we affirm the Board's rejection of New Jersey's NEPA-terrorism contention.

Id. at 126; footnotes omitted. In making its pronouncement in *Oyster Creek*, the Commission found that terrorism contentions are beyond the scope of license renewal. Citing previous agency decisions, the Commission stated:

Terrorism contentions are, by their very nature, directly related to security and are therefore, under our [license renewal] rules, unrelated to 'the detrimental effects of aging.' Consequently, they are beyond the scope of, not 'material' to, and inadmissible in, a license renewal proceeding." Moreover, as a general matter, NEPA "imposes no legal duty on the NRC to consider intentional malevolent acts . . . in conjunction with commercial power reactor license renewal applications." "The 'environmental' effect caused by third-party miscreants 'is . . . simply too far removed from the natural or expected consequences of agency action to require a study under NEPA.'" "[T]he claimed impact is too attenuated to find the proposed federal action to be the 'proximate cause' of that impact."

Id. at 129; footnotes omitted. The Commission's guidance is clear: Terrorism contentions are inadmissible in a license renewal proceeding.

Contentions raising environmental issues in a license renewal proceeding are similarly limited to those issues which are affected by license renewal and have not been addressed by

rulemaking or on a generic basis. *Turkey Point*, CLI-01-17, 54 NRC at 11-12. In 10 C.F.R. Part 51, the Commission divided the environmental requirements for license renewal into generic and plant-specific components. *Id.* at 11. The Generic Environmental Impact Statement (GEIS) contains "Category 1" issues for which the NRC has reached generic conclusions. *Id.* Applicants for license renewal do not need to submit analyses of Category 1 issues in their Environmental Reports, but instead may reference and adopt the generic findings. *Id.* Applicants, however, must provide a plant-specific review of the non-generic "Category 2" issues. *Id.* Category 1 issues "are not subject to site-specific review and thus fall beyond the scope of individual license renewal proceedings." *Id.* at 12;⁴¹ see 10 C.F.R. § 51.53(c)(3)(i)-(ii).

The Commission recently reiterated this principle, and specified that the GEIS Category 1 conclusions generally may not be challenged in a license renewal proceeding:

In 1996, the Commission amended the environmental review requirements in 10 C.F.R. Part 51 to address the scope of environmental review for license renewal applications. The regulations divide the license renewal environmental review into generic and plant-specific issues. The generic impacts of operating a plant for an additional 20 years that are common to all plants, or to a specific subgroup of plants, were addressed in a 1996 GEIS. Those generic impacts analyzed in the GEIS are designated "Category 1" issues. A license renewal applicant is generally excused from discussing Category 1 issues in its environmental report. Generic analysis is "clearly an appropriate

⁴¹ In *Turkey Point*, the Commission recognized that "even generic findings sometimes need revisiting in particular contexts. Our rules thus provide a number of opportunities for individuals to alert the Commission to new and significant information that might render a generic finding invalid, either with respect to all nuclear power plants or for one plant in particular. In the hearing process, for example, petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule." *Turkey Point*, CLI-01-17, 54 NRC at 12. Here, CRORIP has requested a waiver of the Commission's rules adopting the GEIS; however, as discussed *infra* and in the Staff's response to CRORIP's waiver petition, no such waiver has been shown to be appropriate here.

method" of meeting the agency's statutory obligations under NEPA.

The license renewal GEIS determined that the environmental effects of storing spent fuel for an additional 20 years at the site of nuclear reactors would be "not significant." Accordingly, this finding was expressly incorporated into Part 51 of our regulations. Because the generic environmental analysis was incorporated into a regulation, the conclusions of that analysis may not be challenged in litigation unless the rule is waived by the Commission for a particular proceeding or the rule itself is suspended or altered in a rulemaking proceeding.

Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 17 (footnotes omitted), *reconsideration denied*, CLI-07-13, 65 NRC 211, 214 (2007).

B. Analysis of the Petitioners' Proposed Contentions.

As discussed below, most of the contentions proffered by the petitioners raise matters which are outside the scope of this license renewal proceeding, or are otherwise inadmissible for failure to satisfy the requirements in 10 C.F.R. § 2.309(f)(1) and/or Commission case law.. The Staff's views concerning each of the contentions submitted by the petitioners are set forth *seriatim*, in the following discussion.

1. Contentions Filed By the PHASE Petitioners⁴²

PHASE Contention 1

Co-mingling three dockets, and three DPR licenses under a single application is in violation of C.F.R. Rules, Specifically 10 CFR 54.17 (d) as well as Federal Rules for Civil Procedure rule 11(b).

⁴² The five PHASE Petitioners joined in each of the contentions in that Petition.

PHASE Petition at 28. In support of this contention, PHASE argues that Indian Point Units 2 and 3 have separate licenses, separate dockets, separate owners (now and in the past), different operating histories, separate architect/engineers, and separate NRC Staff inspection teams. PHASE Petition at 29-30. It then argues that combining the license renewal applications in a single proceeding violates 10 C.F.R. § 54.17(d) and Rule 11(b) of the Federal Rules of Civil Procedure (“FRCP”). *Id.* at 28.

Staff Response to PHASE Contention 1

The Staff opposes the admission of this contention. Notwithstanding the factual assertions made by PHASE, it fails to show any reason to believe that NRC regulations or other applicable legal requirements prohibit the consideration of the Unit 2 and Unit 3 license renewal in a single administrative proceeding. In particular, nothing in 10 C.F.R. § 54.17(d) prohibits an applicant from presenting, in a single application, its request to renew the operating licenses for two reactors located at a single site. Indeed, the NRC routinely receives and considers license renewal applications submitted for two reactors at a single site. Further, nothing in FRCP Rule 11(b) (“Signing of Pleadings, Motions and Other Papers; Representations to Court; Sanctions”) prohibits the combination of such requests in a single application, nor does it appear to have any relevance whatever to this matter; indeed, PHASE has altogether failed to explain the relevance of that rule here. This contention should be rejected under 10 C.F.R. § 2.309(f)(1)(ii), (v) and (vi).

PHASE Contention 2

The NRC routinely violates §51.101(b) in allowing changes to the operating license be done concurrently with the renewal proceedings.

PHASE Petition at 31. In support of this contention, PHASE claims that the Commission (a) is acting improperly, insofar as it is considering a request for an indirect license transfer that was submitted by Entergy after it submitted the instant license renewal application; (b) acted improperly in modifying an exemption from certain fire protection requirements, after docketing the instant license renewal application; and (c) improperly initiated a rulemaking proceeding to consider revising 10 C.F.R. Part 50 to modify the regulations pertaining to reactor vessel internal component analyses. *Id.* at 31-32, 33-34. According to PHASE, these matters result in substantial changes to the Indian Point licenses and prejudice the license renewal process; further, it requests that the modification to the fire protection exemption be cancelled. *Id.* at 31, 33, 34.

Staff Response to PHASE Contention 2

The Staff opposes the admission of this contention for failing to state an issue that is within the scope of this license renewal proceeding, and for failing to state a legally cognizable basis. The modification to Indian Point's fire protection exemption was considered separately from the license renewal application and was not presented as part of the Applicant's license renewal application. PHASE does not allege in this contention that the exemption modification resulted in any deficiency in the applicant's aging management programs, and it therefore fails to raise an issue that is appropriate for consideration in this proceeding; nor has PHASE shown that its requested relief (rescission of the exemption modification) can be granted by the Licensing Board in this proceeding.⁴³ Similarly, Entergy's indirect license transfer application

⁴³ The Staff's views with respect to PHASE's various fire protection assertions are set forth in response to PHASE Contentions 4 – 11.

was not submitted as part of the license renewal application and is not within the scope of this proceeding, nor has PHASE shown any reason to believe that the license transfer application would adversely affect the Applicant's aging management programs.⁴⁴ Likewise, any matters that are being considered in rulemaking are not proper subjects for consideration in this licensing proceeding; any concerns PHASE may have regarding that rulemaking effort should be presented, if at all, in that rulemaking proceeding.

PHASE has not provided any basis to support its assertion that the matters raised in this contention would adversely affect the license renewal process, nor has it shown any reason to believe that the NRC's consideration of those matters constitutes an "action" on the license renewal application and/or a violation of 10 C.F.R. § 51.101(b).⁴⁵ Its contention should be rejected for failing to state an adequate legal basis and for failing to state an issue that is properly within the scope of this proceeding.

PHASE Contention 3

The NRC violated its own regulations §51.101(b) by accepting a single License Renewal Application made by the following parties:
Entergy Nuclear Indian Point 2, LLC ("IP2 LLC") Entergy Nuclear

⁴⁴ To the extent that PHASE may wish to comment on or contest the indirect license transfer application, it may seek to do so outside the scope of this proceeding. Notices of consideration of the indirect transfer application have been published, providing an opportunity for hearing on that application. See, e.g., "Entergy Nuclear Operations, Inc.; Entergy Nuclear Indian Point 2, LLC; Entergy Nuclear Indian Point 3, LLC; Indian Point Nuclear Generating Unit Nos. 1, 2, and 3; Notice of Consideration of Approval of Application Regarding Proposed Corporate Restructuring and Opportunity for a Hearing," 73 Fed. Reg. 2955 (Jan. 16, 2008).

⁴⁵ 10 C.F.R. § 51.101(b) provides, "[w]hile work on a required program environmental impact statement is in progress, the Commission will not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment" unless one of three conditions is met. *Id.*, (emphasis added). PHASE fails to explain why it believes this provision has any bearing on the issue raised in this contention.

Indian Point 3, LLC (“IP3 LLC”), and Entergy Nuclear Operations, LLC. (Entergy Nuclear Operations), some of which do not have a direct relationship with the license.

PHASE Petition at 34. In this contention, PHASE appears to challenge an application for indirect license transfer submitted by Entergy on July 30, 2007. *See id.* at 34-40.⁴⁶ According to PHASE, the license transfer application proposes a new ownership structure for Indian Point Units 2 and 3, adversely affecting the financial qualifications for Units 2 and 3 and the public’s health and safety. *Id.* at 35, 38-40

Staff Response to PHASE Contention 3

The Staff opposes the admission of this contention. As discussed in response to PHASE Contention 2, *supra*, Entergy’s application for an indirect license transfer is not within the scope of this proceeding. Whatever may be the merits of PHASE’s concerns regarding the proposed license transfer, this license renewal proceeding is not the proper forum for consideration of those concerns.⁴⁷ Further, the Commission has expressly excluded the issue of financial qualifications from license renewal proceedings. 1991 Statement of Consideration, 56 Fed. Reg. at 64,968. Accordingly, this contention should be rejected for failing to present an

⁴⁶ By letter of July 30, 2007, as supplemented by letter of October 31, 2007, Entergy submitted an “Application for Order Approving Indirect Transfer of Control of Licenses”; that application concerns the licenses for the Pilgrim, Indian Point Units 1, 2 and 3, James A. FitzPatrick, Vermont Yankee, Palisades, and Big Rock Point nuclear plants. Entergy subsequently modified that application, by letter dated December 5, 2007. As noted in the Staff’s response to PHASE Contention 2, the Commission has published a notice of consideration and opportunity for hearing on the indirect license transfer application as it pertains to the Indian Point facility. *See* 73 Fed. Reg. 2955 (Jan. 16, 2008).

⁴⁷ As noted in the Staff’s response to PHASE Contention 2, *supra*, the Commission has issued notices of consideration and opportunity for hearing on the indirect license transfer application. *See, e.g.*, 73 Fed. Reg. 2955 (Jan. 16, 2008).

issue that is within the proper scope of this proceeding and for which relief could be granted herein.

PHASE Contention 4

The exemption granted by the NRC on October 4, 2007 reducing Fire Protection standards at Indian Point 3 are a violation of §51.101(b), and do not adequately protect public health and safety.

PHASE Petition at 40. Here, PHASE challenges an October 4, 2007, NRC approval of Entergy's request to modify its existing fire protection exemption to provide for at least a 24-minute rated fire barrier for cable tray configurations, and a 30-minute rating for conduit and box configurations, which is less than the one hour fire barrier specified in 10 C.F.R. Part 50, Appendix R, § III.G.2.c.⁴⁸ The Petitioners attempt to challenge that exemption as a violation of multiple laws and regulations—among them the Administrative Procedure Act; 10 C.F.R. Parts 50, 51, 54, 73, and 10 C.F.R. Part 50 Appendix R; the Energy Policy Act of 2005; NEPA; and Homeland Security Presidential Directive 7—and they assert that the exemption should never have been granted. PHASE Petition at 41-45. Further, the Petitioners claim that this exemption makes Indian Point more susceptible to fire than the Browns Ferry nuclear plant was, over 30 years ago. *Id.*

Staff Response to PHASE Contention 4

⁴⁸ “Entergy Nuclear Operations, Inc., Entergy Nuclear Indian Point 3, LLC, Indian Point Nuclear Generating Unit No. 3; Revision to Existing Exemptions,” 72 Fed. Reg. 56, 798 (Oct. 4, 2007). Because the fire protection exemption is not a license amendment, there is no right to a hearing under section 189a of the Atomic Energy Act. *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 466 (2001) (“a stand-alone exemption request – unrelated to initial licensing or a license amendment – did not fall under the AEA § 189a hearing requirement.”).

The Staff opposes the admission of this exemption as being outside the scope of this license renewal proceeding. The Petitioners improperly attempt to challenge the exemption itself, claiming that the 24- and 30-minute rated fire barriers do not provide enough protection. The Petitioners fail to demonstrate that a genuine dispute exists with the Applicant regarding a material issue of law or fact in this proceeding. See 10 C.F.R. 2.309(f)(1)(vi). Thus, the Petitioners fail to challenge either specific portions of, or alleged omissions in, the LRA. See *id.*; *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004). Once exemptions are issued, they become part of a plant's current licensing basis ("CLB"), according to 10 C.F.R. § 54.3. As such, the exemption would be included in any renewed license, but only those structures, systems, and components subject to aging management review are within the scope of license renewal. 1995 Statement of Consideration, 60 Fed. Reg. at 22,461, 22,473-74. The Petitioners do not show that any portion of the fire protection exemption was inadequately considered in the LRA, and they therefore fail to raise an issue that is appropriate for consideration in the proceeding. Thus, issues pertaining to the CLB: "(1) are not germane to aging management concerns; (2) previously have been the subject of thorough review and analysis; and, accordingly (3) need not be revisited in a license renewal proceeding." *AmerGen Energy Co.* (Oyster Creek Nuclear Generating Station), LBP-07-17, 66 NRC __ (Dec. 18, 2007) (slip op. at 14, n.17); see also *Florida Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 10 (2001) ("Issues . . . which already are the focus of ongoing regulatory processes - do not come within the NRC's safety review at the license renewal stage."). As such, the fire protection exemption is outside the scope of this proceeding and therefore this contention should not be admitted.

The Fire Protection Program described in the Current License Basis Documents including the unlawfully approved exemptions to Appendix R, the Safety Evaluation and the amended license for Indian Point 3 fail to adequately protect the health and safety of the public, and fail to meet the requirements of 10 CFR 50 and Appendix R.

PHASE Petition at 60. Petitioners contend that the NRC improperly issued the fire protection exemption for the reasons discussed above. In addition, they assert that because the Hemyc fire wrap will not provide a fire barrier for the 24 and 30-minutes as stated in the exemption, which is part of Indian Point's CLB, the exemption must be reviewed in the license renewal proceeding. PHASE Petition at 69, 74.

Staff Response to PHASE Contention 5

The Staff opposes the admission of this contention for the reasons explained in its response to PHASE Contention 4 above, which is incorporated by reference herein. In sum, the exemption is not within the scope of this proceeding, and therefore the contention should not be admitted.

PHASE Contention 6

Fire Protection Design Basis Threat. The Applicant's License Renewal Application fails to meet the requirements of 10 CFR54.4 "Scope," and fails to implement the requirements of the Energy Policy Act of 2005.

PHASE Petition at 81. The Petitioners contend that the fire protection exemption discussed in Contention 4 violates the Design Basis Threat (DBT) rule because a fire will not be able to be extinguished within 24 minutes. PHASE Petition at 86.

Staff Response to PHASE Contention 6

The Staff opposes the admission of this contention because the Petitioners fail to meet the minimal requirements of contention admissibility; and, even if the Petitioners had met those

requirements, neither the DBT rule nor the Energy Policy Act nor the fire protection exemption are within scope of license renewal.

First, the Petitioners fail to meet the bare requirements of 10 C.F.R. § 2.309(f)(1)(i) and (ii), by failing to show how the DBT rule and the fire protection exemption have anything to do with one another. Although “[t]he potential for fires, especially fires of long duration” is listed as a factor the Commission is to consider under the Energy Policy Act of 2005,⁴⁹ the Petitioners never make this reference. Instead, they highlight other factors, none of which have anything to do with fire protection. See PHASE Petition at 83. Further, the Petitioners discuss aspects of the DBT that have to do with physical protection—like the size of potential attacking forces and types of weaponry—but they never relate that to fire protection. Instead, the Petitioners list portions of the DBT that don’t involve fire protection, and then assert that Entergy cannot adequately extinguish a fire in 24 minutes. PHASE Petition at 84-86. Thus, the Petitioners not only fail to show any violation of law, they also fail to show the nexus between the DBT rule and the fire protection exemption granted by the NRC.

Second, challenges to the DBT are not within scope of license renewal. Licensees are required to establish and maintain physical protection systems that will protect against the design basis threats outlined in 10 C.F.R. § 73.1. Challenges to the DBTs listed in § 73.1 are challenges to NRC rules, and as such, are not within the scope of license renewal.

With limited exceptions, “no rule or regulation of the Commission ... is subject to attack ... in any adjudicatory proceeding.” 10 C.F.R. § 2.335(a); see also *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). By the same token, any contention that amounts to

⁴⁹ “Energy Policy Act of 2005”, §651(a) (1), 42 U.S.C. §15801 (2005).

an attack on applicable statutory requirements or represents a challenge to the basic structure of the Commission's regulatory process must be rejected. *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-82-76, 16 NRC 1029, 1035 (1982) (citing *Peach Bottom*, ALAB-216, 8 AEC at 20-21). Additionally, the adjudicatory process is not the proper venue for a petitioner to set forth any contention that merely addresses his or her own view regarding the direction regulatory policy should take. *Peach Bottom*, ALAB-216, 8 AEC at 21 n.33.

Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-04-28, 60 N.R.C. 548, 557-8 (2004).

Third, challenges to a plant's physical security are outside the permissible scope of a license renewal proceeding. See Staff Response for PHASE Contention 19, *infra*, which is incorporated by reference herein.

Finally, as discussed above, the fire protection exemption is not within scope of this license renewal proceeding. See Response to PHASE Contention 4, *supra* (incorporated by reference herein).

For all of these reasons, PHASE Contention 6 is inadmissible.

PHASE Contention 7

Fire initiated by a light airplane strike risks penetrating vulnerable structures.

PHASE Petition at 86. Here, the Petitioners contend that the approval of the fire protection exemption was a violation of 10 C.F.R. Part 73, "Physical Protection of Plants and Materials," and the Atomic Energy Act. PHASE Petition at 92. As a basis for this contention, Petitioners claim that the 24-minute fire barrier is not enough to protect against the increased threat of terrorism via airplane crashes into Indian Point. *Id.* at 86.

Staff Response to PHASE Contention 7

The Staff opposes the admission of this contention, because the Petitioners fail to meet the minimal requirements of contention admissibility; and, even if they had met those requirements, neither the requirements of Part 73 nor the fire protection exemption is within the scope of license renewal. In order to avoid unnecessary repetition, the Staff incorporates by reference herein its responses to PHASE Contentions 4, 6 and 19.

Finally, even if any part of the Petitioners' contention was within scope, the asserted bases for PHASE Contention 7 lack sufficient facts. See 10 C.F.R. § 2.309(f)(1)(v). The Petitioners impermissibly rely on vague references to statistics concerning air traffic around Indian Point; vague, non-expert thoughts on what type of damage an airplane crash would cause; and generalized suspicions regarding the time required before a fire could be extinguished. See PHASE Petition at 86, 89-90. These types of assertions fail to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v)-(vi). See *Dominion Nuclear Connecticut* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 363 (2001). Although the Petitioners do refer to various studies and reports contained within their extensive exhibits, their failure to provide facts and experts to support the contention renders Contention 7 inadmissible.

For all of the above reasons, this contention should be rejected.

PHASE Contention 8

The NRC improperly granted Entergy's modified exemption request reducing fire protection standards from 1 hour to 24-minutes while deferring necessary design modifications.

PHASE Petition at 92. The Petitioners contend that the fire protection exemption granted by the NRC to allow for 24-minute fire barriers was not an exemption, but rather a license amendment, and as such a hearing should have been allowed. PHASE Petition at 95. As a basis, Petitioners claim that Hemyc, a type of fire barrier material, cannot provide the 24 minutes of fire

protection mandated by the exemption and as such, the exemption should be reexamined. See PHASE Petition at 93.

Staff Response to PHASE Contention 8

The Staff opposes the admission of this contention. Neither the fire protection exemption in general, nor the issue of whether an amendment or exemption was more appropriate is within the scope of license renewal. The Petitioners here do not challenge anything relating to license renewal, and thus fail to show that a genuine dispute exists with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). Whether or not an amendment or exemption was the more appropriate avenue for allowing a change from a one hour fire barrier to a 24-minute fire barrier is an issue outside the scope of license renewal. The scope of license renewal proceedings is limited. The Commission's "[l]icense renewal reviews are not intended to 'duplicate the Commission's ongoing review of operating reactors.'" *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3, 7 (2001) (*citing* Final Rule, "Nuclear Power Plant License Renewal," 56 Fed. Reg. 64,943, 64,946 (Dec. 13, 1991)). The license renewal safety review process focuses on the "potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs." *Id.* Consequently, "10 C.F.R. Part 54 requires renewal applicants to demonstrate how their programs will be effective in managing the effects of aging during the period of extended operation." *Id.* at 8 (*citing* 10 C.F.R. § 54.21(a)). Applicants are required to "identify any additional actions, i.e., maintenance, replacement of parts, etc., that will need to be taken to manage adequately the detrimental effects of aging." *Id.* (*citing* Final Rule, "Nuclear Power Plant License Renewal; Revisions," 60 Fed. Reg. 22,461, 22,463 (May 8, 1995)). In claiming that an improper exemption was grounded when an amendment was supposedly required, the Petitioners fail to point to any portion of the LRA that is deficient, contrary to the requirements of

10 C.F.R. § 2.309(f)(1)(iv)-(vi). Further, the fire protection exemption is not within the permissible scope of this license renewal proceeding. See NRC Response to PHASE Contention 4, *supra*, which is incorporated by reference herein.

For these reasons, the contention should be rejected.

PHASE Contention 9

In violation of promises made to Congress the NRC did not correct deficiencies in fire protection, and instead have reduced fire protection by relying on manual actions to save essential equipment.

PHASE Petition at 95. In this contention, the Petitioners again contend that the NRC improperly granted the fire protection exemption. *Id.* As a basis, the Petitioners claim that other plants have defied the NRC's rules regarding fire protection and that other fire barriers (Thermo-Lag) have failed in the past, suggesting that Hemyc will likely fail, too. *Id.* at 96-98.

Staff Response to PHASE Contention 9

The Staff opposes the admission of this contention. Whether or not the basis statements provided by PHASE are adequate to support a contention, the fire protection exemption is simply not within scope of license renewal. See Staff Response to PHASE Contention 4, which is incorporated by reference herein. Further, the Petitioners' reference to incidents at other plants using different fire protection materials fail to provide an adequate basis for this contention. See 10 C.F.R. § 2.309(f)(1)(v). The Petitioners not only fail to show what plants supposedly "directly def[ie]d] the present rules regarding fire protection," PHASE Petition at 95, but also failed to provide even a scintilla of facts or expert opinion on how whatever situation existed with respect to Thermo-Lag (which Petitioners also failed to elaborate upon) was in any way connected to Indian Point and the Hemyc exemption. Therefore, those bases fail to support the contention. Accordingly, the contention should be rejected.

PHASE Contention 10

(Unit 2) Cable separation for Unit 2 is non-compliant, fails to meet Appendix R criteria. This has been a known issue since 1976; and again in 1984, yet remains non-compliant today.

PHASE Petition at 98. The Petitioners contend that the cable separation for Unit 2 violates the GDC and Appendix R criteria, and as such, a single fire could occur and cause worse damage than what occurred at Browns Ferry. *Id.* at 98-99. The Petitioners further claim that “without adequate design measures in place”, the AMP is “meaningless”. *Id.* at 99.

Staff Response to PHASE Contention 10

The Staff opposes the admission of this contention. Proposed Contention 10 is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309. First, the asserted bases fail to demonstrate that a genuine dispute exists with the Applicant regarding a material issue of law or fact. See 10 C.F.R. 2.309(f)(1)(vi). The Petitioners also fail to meet the requirement to challenge either specific portions of, or alleged omissions in, the LRA. See *id.*; *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004). Additionally, the Petitioners’ reliance on unsubstantiated assertions without reference to the LRA fails to demonstrate that there are material issues of fact in dispute. See 10 C.F.R. § 2.309(f)(1)(vi).

Second, the Petitioners’ asserted bases for proposed Contention 10 lack sufficient facts and contain no supporting expert opinion. See 10 § C.F.R. 2.309(f)(1)(v). The Petitioners impermissibly rely on generalized suspicions and vague references to Browns Ferry to prove that the cable separation is unacceptable. This fails to provide an adequate basis. See *id.*; *Dominion Nuclear Connecticut* (Millstone Nuclear Power Station Units 2 and 3), CLI-01-24, 54 NRC 349. 363 (2001). Neither the Petitioners, nor the sources relied upon, identify any

components of particular concern, as required. *Id.* Further, the Petitioners cite no expert opinion in support of their alleged facts. See 10 C.F.R. § 2.309(f)(1)(v). Moreover, it remains unclear what exactly the Petitioners wish to litigate, contrary to 10 C.F.R. § 2.309(f)(1)(vi). *Millstone, supra*, 54 NRC at 363.

Finally, to the extent that the contention challenges the CLB or original design of the plant, such challenges are impermissible here. See 1991 Statement of Consideration, 56 Fed. Reg. at 64,946. Consequently, Proposed Contention 10 is inadmissible.

PHASE Contention 11A

(Unit 2 and Unit 3): The Fire protection program as described on page B-47 of the Appendix B of the Applicant's LRA does not include fire wrap or cable insulation as part of its aging management program.

PHASE Petition at 99. The Petitioners contend that the "LRA is inadequate and inaccurate" because it fails to address fire insulation for cables. *Id.* at 99-101.

Staff Response to PHASE Contention 11A

The Staff does not oppose the admission of this contention to the extent that it asserts that fire wraps are not specifically addressed in the Fire Protection aging management program. Per the Applicant's LRA, fire wraps are subject to aging management review. LRA Table 2.4-4, at 2.4-38. Further, fire wraps are managed under the Fire Protection program. *Id.* Table 3.5.2-4, at 3.5-70. However, the Fire Protection program refers generically to a fire barrier inspection without further clarification as to whether fire wraps are included within that category. See LRA, ¶ B.1.13, B-47.

The Staff opposes the admission of this contention with respect to its claim that cable insulations are not part of the Applicant's aging management program. First, the Petitioners do

not state which specific cable insulation they are referring to. Furthermore, the Non-EQ Insulated Cables and Connections Program, LRA, ¶ B.1.25, at B-85, covers the aging management of electrical cables and insulation, which are in scope of the aging management review. See LRA Table 2.5-1, at 2.4-4; LRA Table 3.6.2-1, at 3.6-15. Therefore, the Petitioners' claim regarding cable insulation does not present a genuine dispute of material fact, and should be dismissed.

PHASE Contention 11B

Environmental Impact of an increase in risk of fire damage due to degraded cable insulation is not considered thus the Applicants' LRA is incomplete and inaccurate, and the Safety Evaluation supporting the SAMA analysis is incorrect.

PHASE Petition at 101. The Petitioners contend that the Indian Point's failure to provide for one hour fire protection is in violation of 10 C.F.R. Part 50, and thus the LRA is inadequate. *Id.* at 102. The Petitioners further contend that Indian Point's SAMA analysis is incomplete. *Id.*

Staff Response to PHASE Contention 11B

The Staff opposes the admission of this contention on the grounds that it is outside the scope of this proceeding and lacks adequate basis. Indian Point Unit 3 was granted a modified exemption from the one hour fire protection requirement in October 2007. Challenges to the fire protection exemption are outside the scope of this proceeding as discussed in the Staff's Response to PHASE Contention 4 above.

In addition, this contention fails because it does not link the alleged deficiency to any material issue of fact. Specifically, PHASE has not shown that the alleged degraded cable insulation will result in a material change in the SAMA analysis. It presumes that a failure to address an item in the SAMA analysis is a valid criticism in and of itself. But this ignores the

requirement that contentions must demonstrate that they raise material issues of fact or law. And in this instance, PHASE has not demonstrated that, if the alleged degraded cable insulation was included in the SAMA analysis, the inclusion would result in any significant change in the conclusions of that analysis, regarding the identification of cost-beneficial SAMA candidates.

PHASE Contention 12

Entergy either does not have, or has unlawfully failed to provide the Current License Basis (CLB) for Indian Point 2 and 3, accordingly the NRC must deny license renewal.

PHASE Petition at 103. In support of PHASE Contention 12, PHASE states that neither the NRC nor the Government Accountability Office (GAO) has been able to determine if the CLB is known, current, documented, and available, and the NRC's Office of Inspector General has concluded the CLB is not known. *Id.* at 103. Further, PHASE asserts that the CLB includes a design basis verification program for IP2 and IP3, and the status is outdated. *Id.* at 104. In addition, the Petitioners assert that the time to request a hearing should not have started until all stakeholders had the full and complete LRA, *Id.* at 104, and that neither the NRC nor the Applicant has made a list all granted "Exemptions, Exceptions and Deviations from the CLB" that will be carried over into extended period of operations, which should be required. *Id.* at 106.

Staff Response to PHASE Contention 12

The Staff opposes the admission of Contention 12. The Contention fails to identify an error or omission in the application, and fails to present a material issue for license renewal. PHASE cites no regulation requiring that a list of "Exemptions, Exceptions and Deviations" be provided. Indeed, no requirement for such a list may be found in 10 C.F.R. §§ 54.19 (Contents

of application--general information), 54.21 (Contents of application--technical information), 54.22 (Contents of application--technical specifications).

The Statements of Consideration for the License Renewal Rulemaking also show that the Applicant need not compile or provide the CLB. As part of the public comment process during the 1995 rulemaking, the Commission considered comments concerning the compilation of the CLB, and reconfirmed its conclusion stated for the 1991 rulemaking, that it is not necessary to compile, review, and submit a list of documents that comprise the CLB for a license renewal review. See 1995 Statement of Consideration, 60 Fed. Reg. at 22,474.

The Staff notes that pursuant to 10 C.F.R. § 54.19, a list must be provided of plant-specific exemptions granted pursuant to 10 C.F.R. § 50.12 and in effect that are based on time-limited aging analyses as defined in 10 C.F.R. § 54.3. See 10 C.F.R. 54.21(c)(2). Further, the applicant is required to provide an evaluation that justifies the continuation of these exemptions for the period of extended operation. *Id.* The Applicant demonstrated awareness of this regulation, and documented that no exemption pursuant to 10 C.F.R. § 50.12 involving a time-limited aging analysis as defined in 10 CFR § 54.3 is required during the period of extended operation. LRA at ii. Further, the Applicant stated that it searched CLB documents including the Technical Specifications, the UFSARs, and NRC correspondence, and found no exemptions based on time-limited aging analyses. LRA at 4.1-2. PHASE has not alleged that a TLAA-related exemption existed and was not listed in the LRA. Accordingly, there is no material issue of fact presented in PHASE Contention 12, and the Staff opposes the admission of the contention to the extent that it alleges that a list of exemptions was not provided.

Finally, to the extent that PHASE Contention 12 says that the hearing request time should not commence until all stakeholders have a complete LRA, such a challenge amounts to an impermissible challenge to NRC regulations, and is not suitable for admission as a

contention in a license renewal proceeding. The Commission's regulations specifically state that contentions must be filed based on available information, and allow for new proposed contentions to be filed as new information becomes available. Accordingly, PHASE's assertion constitutes an impermissible challenge to the regulations. See 10 C.F.R. § 2.309(f)(2).

PHASE Contention 13

The LRA is incomplete and should be dismissed, because it fails to present a Time Limiting Aging Analysis and an Adequate Aging Management Plan, and instead makes vague commitments to manage the aging of the plant at uncertain dates in the future, thereby making the LRA a meaningless and avoidable "agreement to agree."

PHASE Petition at 106. In support of Contention 13, PHASE states that the submitted LRA contains uncertain and undefined commitments with regard to the AMPs. *Id.* at 106-07. PHASE asserts that a renewed license should not be approved because the LRA fails to constitute a binding agreement, that Entergy's vague commitment to perform aging management is meaningless; that Entergy fails to provide the required Time Limiting Aging Analysis (TLAA) and adequate Aging Management Plans to deal with known plant degradation issues; that Entergy's LRA fails to provide AMPs apart from vague commitments, and this precludes stakeholder and NRC review. *Id.* at 107. Finally, PHASE asserts that Indian Point Units 2 and 3 made promises in the early 70's to design and build a closed cooling system, with a delivery date of 1979, but Entergy has failed to keep that promise and is now actively fighting against the installation of a closed cooling system. *Id.* at 111.

Staff Response to PHASE Contention 13

The Staff opposes the admission of PHASE Contention 13 because it is vague, lacks expert support, fails to specify portions of the application with which it disagrees, and fails to

state an admissible issue.⁵⁰ For example, it fails to specify what known degradation issues allegedly are not addressed and lack AMPs. See *id.* at 107.

Moreover, the majority of PHASE Contention 13 is targeted not at the LRA, but at what the NRC may accept or approve, and what constitutes a legally-enforceable license. Such policy or legal questions do not address the fundamental requirements of 10 C.F.R. § 2.309(f)(1)(vi) to show which portions of the application the Petitioner disputes, and do not support the admission of Contention 13.

In addition, the regulations in 10 C.F.R. Part 54 recognize and account for applicant commitments. For example, the definition of the CLB includes a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements that are docketed and in effect. See 10 C.F.R. § 54.3. Further, the SRP-LR recognizes that commitments may be used, for example, to create or supplement AMPs. See *e.g.*, NUREG-1800-01 at 3.03-3. Accordingly, the LRA is not deficient for including commitments instead of final programs. Moreover, the adjudicatory process is not the proper venue for evaluation of PHASE's view that, as regulatory policy, the NRC cannot accept commitments. See Memorandum and Order (Denying the Village of Buchanan's Hearing Request and Petition to Intervene), (dated December 5, 2007) at 8 (*citing Peach Bottom*, ALAB-216, 8 AEC at 21 n.33).⁵¹

⁵⁰ A similar contention was proffered as FUSE Contention 5, which is addressed *infra*.

⁵¹ In *Peach Bottom*, the Atomic Safety and License Appeal Board stated: "If facts pertaining to the licensing of a particular nuclear power plant are at issue, an adjudicatory proceeding is the right forum. But if someone wants to advance generalizations regarding his particular views of what applicable policies ought to be, a role other than as a party to a trial-type hearing should be chosen." *Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3)* 8 A.E.C. 13, at 21 n.33.

Accordingly, PHASE Contention 13 should be rejected.⁵²

PHASE Contention 14

The LRA submitted fails to include Final License Renewal Interim Staff Guidance. For example, LR-ISG, “Staff guidance for preparing Severe Accident Mitigation Alternatives.

PHASE Petition at 112-113.

Staff Response to PHASE Contention 14

PHASE Contention 14 lacks specificity and basis. The PHASE Petitioners apparently claim that the LRA is deficient because the Applicant did not insert a copy of an NRC Staff issued guidance document in the LRA. Such an assertion is undercut by the only document PHASE submits in its support, *i.e.* an excerpt from the Federal Register giving notice that the Guidance is available. PHASE Exhibit BB. But that notice merely states that the NRC Staff “recommends that applicants for license renewal use the Guidance Document Nuclear Energy Institute (“NEI”) 05-01, Revision A, [citation omitted] when preparing their SAMA analyses.” *Id.* Nowhere in this brief contention does PHASE identify any instance in which the Applicant has failed to use the NEI guidance document in preparing its SAMA analyses. The contention is, therefore, inadmissible for lack of specificity and basis.

PHASE Contention 15

⁵² PHASE states that it seeks to incorporate its Contention 8 into this Contention. See PHASE Contention at 112. Contention 8 asserted that the NRC acted improperly in granting a fire protection exemption request. *Id.* at 92. PHASE Contention 8 is unrelated to Contention 13 and does not support the admission of Contention 13.

Regulations provides [sic] that in the event the NRC approves the LRA, then old license is retired, and a new superseding license will be issued, as a matter of law § 54.31. Therefore all citing [sic] criteria for a new license must be fully considered including population density, emergency plans and seismology, etc.

PHASE Petition at 113. In support of this contention, PHASE states that the grant of a license renewal application results in the issuance of a “new,” superseding license, rather than an amendment of the existing license; as a result, PHASE contends that the LRA may not be granted unless the Applicant shows that it meets “all” of the siting criteria applicable to an initial operating license application. *Id.* at 114-16, 122. According to PHASE, this requires consideration in this proceeding of numerous issues, including (a) site geology/seismology, (b) atmospheric dispersion, (c) the exclusion area and low population zone, (d) population considerations, (e) emergency planning, (f) security plans, (g) hydrology and flooding, (h) water quality, and (i) the presence of industrial, military and transportation facilities. *Id.* at 116-121.

Staff Response to PHASE Contention 15

The Staff opposes the admission of this contention. In 10 C.F.R. §54.31(c), the Commission provided that “[a] renewed license will become effective immediately upon its issuance, thereby superseding the operating license previously in effect.” Notwithstanding PHASE’s efforts to provide new meaning for the term “superseding license,” the Commission explicitly addressed that issue in its 1991 Statement of Consideration adopting the license renewal regulations in 10 C.F.R. Part 54. In this regard, in deciding that an antitrust review is not required for issuance of a superseding license upon license renewal, the Commission observed that license “renewal applications are neither an ‘initial application’ for an operating license nor an initial application for a ‘new or substantially different facility.’” 1991 Statement of Consideration, 56 Fed. Reg. at 64,970. Further, the Commission instructed that the issuance of

a superseding license is not equivalent to the grant of an initial license, and does not require the consideration of issues governing the issuance of an initial operating license:

The most fundamental issue in this rulemaking is what standards and scope of review should apply to license renewal decisions. The Commission's approach to and resolution of these issues are discussed in detail in section IV. In brief:

(1) It is not necessary for the Commission to review each renewal application against standards and criteria that apply to newer plants or future plants in order to ensure that operation during the period of extended operation is not inimical to the public health and safety. Since initial licensing, each operating plant has continually been inspected and reviewed as a result of new information gained from operating experience. Ongoing regulatory processes provide reasonable assurance that, as new issues and concerns arise, measures needed to ensure that operation is not inimical to the public health and safety and common defense and security are "backfitted" onto the plants. The Commission cannot conclude that its regulation of operating reactors is "perfect" and cannot be improved, that all safety issues applicable to all plants have been resolved, or that all plants have been and at all times in the future will operate in perfect compliance with all NRC requirements. However, based upon its review of the regulatory programs in this rulemaking, the Commission does conclude that (a) its program of oversight is sufficiently broad and rigorous to establish that the added discipline of a formal license renewal review against the full range of current safety requirements would not add significantly to safety, and (b) such a review is not needed to ensure that continued operation during the period of extended operation is not inimical to the public health and safety.

Id. at. 64,946. Similarly, the Commission concluded that "there is likely only one real issue generally applicable to all plants -- age-related degradation." *Id.* In turn, the Commission determined to provide an opportunity for hearing, "to permit interested persons to raise contentions on the adequacy of the renewal applicant's proposals to address age-related degradation unique to license renewal and compliance with applicable requirements of 10 CFR part 51." *Id.*; (emphasis added).

Similarly, in *Turkey Point*, the Commission examined the scope of the environmental and safety issues that may be raised in a license renewal proceeding, based, in part, on its desire “to give helpful guidance for future license renewal adjudications.” *Turkey Point, supra*, 54 NRC at 6. The Commission observed that in developing its license renewal regulations, it “sought to develop a process that would be both efficient, avoiding duplicative assessments where possible, and effective, allowing the NRC staff to focus its resources on the most significant safety concerns at issue during the renewal term.” *Id.* The Commission continued:

The issues and concerns involved in an extended 20 years of operation are not identical to the issues reviewed when a reactor facility is first built and licensed. For example, many safety questions related to plant aging will become important only during the extended renewal term.

In contrast, other safety issues were thoroughly reviewed when the facility was first licensed, and now are routinely monitored and assessed by ongoing agency oversight and agency-mandated licensee programs. To require a full reassessment of these issues at the license renewal stage, the Commission found, would be both unnecessary and wasteful. Accordingly, the NRC's license renewal review focuses upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs. License renewal reviews are not intended to “duplicate the Commission's ongoing review of operating reactors.” See “Final Rule, Nuclear Power Plant License Renewal,” 56 Fed. Reg. 64,943, 64,946 (Dec. 13, 1991) (emphasis added).

Id. at 7; emphasis added. Further, the Commission observed that “[i]n establishing its license renewal process, the Commission did not believe it necessary or appropriate to throw open the full gamut of provisions in a plant's current licensing basis to re-analysis during the license renewal review.” *Id.* at 9. Finally, commenting on the scope of safety issues that may be raised in an adjudicatory proceeding, the Commission stated, “[a]djudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC staff review, for

our hearing process (like our staff's review) necessarily examines only the questions our safety rules make pertinent." *Id.* at 10.

The Commission's identification of the issues pertinent to license renewal establishes the permissible scope of a license renewal proceeding. PHASE's attempt to raise other issues that pertain to initial plant licensing and the NRC's regulatory oversight of licensed reactors, based on its unsupported interpretation of the term "superseding license," would introduce issues that are not material to a decision on license renewal. Accordingly, this contention should be rejected.

PHASE Contention 16

An updated seismic analysis for Indian Point must be conducted and Applicant must demonstrate that Indian Point can avoid or mitigate a large earthquake. Indian Point sits nearly on top of the intersection of two major earthquake belts.

PHASE Petition at 123. To support this contention, PHASE cites statements by Dr. Leonardo Seeber, a seismologist at the Lamont-Doherty Earth Observatory of The Earth Institute at Columbia University (Lamont-Doherty), concerning the potential significance of seismic events, *citing* Interview with Dr. Seeber, reported in *The Journal News*, "Lessons learned from the earthquake in Japan," by Greg Clary (July 20, 2007). PHASE Petition at 124. PHASE further cites a July 2004 presentation made at public hearings and submitted in writing to the NRC by Dr. Lynn R. Sykes, a seismologist at Lamont-Doherty and a professor of Earth and Environmental Sciences at Columbia University⁵³; Dr. Sykes noted that the east-northeasterly

⁵³ "Earthquake Risks to Spent Fuel at Indian Point", a Statement by Lynn R. Sykes, Higgins Professor of Earth and Environmental Sciences, Lamont-Doherty Earth Observatory of Columbia University at Meeting (continued. . .)

direction of maximum compressive stress in the Indian Point region is such that “faults of either orientation” could rupture in significant earthquakes. Dr. Sykes noted that any estimate of earthquake risk necessarily includes both belts, which essentially results in a risk of 27 percent. *Id.* at 125. PHASE further alleges that neither Applicant nor the NRC has conducted a seismic analysis relevant to the relicensing of Indian Point, *Id.*; that the ISFSI presents risks which are ignored by Applicant; that the spent fuel pool and ISFSI risks are additive, and most likely multiplicative, under earthquake conditions; and that Indian Point is an aged plant, especially vulnerable to the risks presented by an earthquake, and the Applicant’s Aging Management Plan ignores these risks. *Id.* at 125-37.

Staff Response to PHASE Contention 16

The Staff opposes the admission of this contention on the grounds that it raises an issue that is outside the scope of this license amendment proceeding, the issue raised is not material to the findings the NRC must make for license renewal, there is not sufficient information to show that a genuine dispute exists on a material issue of law or fact, as required by 10 C.F.R. §§ 2.309(f)(1)(iii), (iv), (vi), and it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309. The Petitioners’ reliance Dr. Leonardo Seeber’s interview and Dr. Sykes’ statement does not provide sufficient information to show that there are material issues of fact in dispute. Petitioner’s asserted bases for this proposed Contention lack sufficient facts and contain no supporting expert opinion that show a genuine dispute of material fact for

(. . .continued)

of U.S. Nuclear Regulatory Commission on Interim Storage of Spent Nuclear Fuel at Indian Point (July 15, 2004).

license renewal, as required by 10 C.F.R. § 2.309(f)(1)(v)-(vi). Throughout its discussion of this proposed contention, the Petitioner raised numerous vague and unconnected issues but does not provide legal support to show why the application is inadequate or why those issues must be addressed in this proceeding. It is impermissible for the Petitioner to rely on generalized suspicions and vague references to alleged events at other plants and equally unparticularized portions of general studies, in lieu of providing a factual basis for challenging the LRA. This contention deals with a CLB issue and is outside the scope of this proceeding.

The Commission has provided guidance for license renewal adjudications regarding what safety and environmental issues fall within or beyond its license renewal requirements. *See Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3, 6 (2001). The failure of a proposed contention to demonstrate that the issue is within the scope of the proceeding is grounds for its dismissal. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 567 (2005). Specifically, the NRC conducts a technical review pursuant to 10 C.F.R. Part 54, to assure that pertinent public health and safety requirements have been satisfied. *Turkey Point*, CLI-01-17, 54 NRC at 6. In addition, the NRC performs an environmental review pursuant to 10 C.F.R. Part 51 to assess the potential impacts of twenty additional years of operation. *Id.* at 6-7. The Commission has clearly indicated that its license renewal safety review focuses on “plant systems, structures, and components for which current [regulatory] activities and requirements *may not* be sufficient to manage the effects of aging in the period of extended - operation.” *Id.* at 10, *quoting* 60 Fed. Reg. at 22,469. Further, the Commission stated that: “Adjudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review; for our hearing process (like our Staff’s review) necessarily examines only the [safety] questions our safety rules make pertinent.” *Id.* at 10.

The Petition deals with an issue challenging current regulatory compliance in a license renewal proceeding, which is impermissible. The Petitioner offers absolutely no case authority or reference to a regulation to support its assertions regarding matters of current regulatory compliance. Furthermore, the 1991 Statement of Consideration issued for the license renewal rulemaking demonstrates that the rule explicitly "does not require submission of information relating to the adequacy of, or compliance with, the current licensing basis." 56 Fed. Reg. at 64,961. Therefore, any argument regarding the continued violation of the plant's current licensing basis or other compliance issues is not material to the findings the NRC must make; as such, the Petitioners' argument fails to satisfy the materiality requirement of 10 C.F.R. 2.309(f)(1)(iv). Accordingly, inasmuch as this Contention addresses current compliance and fails to raise a matter that is properly within the scope of this license renewal proceeding, it is not admissible and should be rejected.⁵⁴

PHASE Contention 17

The population density within the 50 mile Ingestion Pathway EPZ of Indian Point is over 21 million, the population within in the 10 mile plume exposure pathway EPZ exceeds 500,000.

PHASE Petition at 140. The PHASE Petitioners argue that the NRC cannot issue a "new" license for Indian Point because "[b]ased on 10 CFR Part 100 'Reactor Site Criteria' Indian Point could not be cited where is it [sic] located today in Westchester County." *Id.* at 140-41.

⁵⁴ Regardless of whether or not a license renewal application has been filed for a facility, the Commission has a continuing responsibility to oversee the safety and security of ongoing plant operations, and it routinely oversees a broad range of operating issues under its statutory responsibility to assure the protection of public health and safety for operations under existing operating licenses. Therefore, for license renewal, the Commission has found it unnecessary to include a review of issues already monitored. Any concerns PHASE may have in this regard may be presented separate from this proceeding.

They then also claim that the population in and around Indian Point has increased substantially over the past several decades and that it will continue to do so. *Id.* at 141-42.

Staff Response to PHASE Contention 17

The Staff opposes the admission of this contention on the grounds that it fails to state a genuine dispute as to a material issue of law or fact, and it raises an issue that is outside the scope of license renewal. 10 C.F.R. § 2.309(f)(1)(iii)-(v).

The Petitioners' proposed contention provides nothing more than a general discussion of the population within 50 miles of Indian Point, along with the claim that under the reactor siting criteria in 10 C.F.R. Part 100, the NRC cannot renew Entergy's operating licenses. See PHASE Petition at 140-41. The Petitioners' contention does not address any issue that falls within the scope of license as the Commission has explicitly stated. See 1991 Statement of Consideration, 56 Fed. Reg. at 64,960, 64,967. For these reasons, PHASE Contention 17 should be rejected.

PHASE Contention 18

Emergency Plans and evacuation plans for the four counties, surrounding are inadequate to protect public health and safety, due to limited road infrastructure, increased traffic and poor communications.

PHASE Petition at 142. The PHASE Petitioners argue that the adequacy of emergency plans "must be considered in the LRA" prior to license renewal. *Id.* at 143. PHASE relies on a series of reports and studies in an effort to show that Indian Point's emergency plans are inadequate. *Id.* at 144-46. Finally, the PHASE Petitioners contend that the LRA should include "a comprehensive evaluation of any and all resulting Environmental Impacts and Costs of such accident pathway caused by failure of the Emergency Plans." *Id.* at 146-47.

Staff Response to PHASE Contention 18

The Staff opposes the admission of this contention on the grounds that it is beyond the scope of this license renewal proceeding. See 10 C.F.R. § 2.309(f)(1)(iii)-(iv).

The Commission has expressly held that “emergency planning issues fall outside the scope of [a] license renewal proceeding.” *Millstone*, 62 NRC at 561. See also 10 C.F.R. § 50.47(a) “No finding under this section is necessary for the issuance of a renewed nuclear power reactor operating license.”). The Commission also noted, “Emergency planning is, by its very nature, neither germane to age-related degradation nor unique to the period covered by the [facility’s] license renewal application.” *Millstone*, 62 NRC at 561. Moreover, as the Commission has explained, “[i]ssues like emergency planning – which already are the focus of ongoing regulatory processes – do not come within the NRC’s safety review at the license renewal stage.” *Florida Power & Light Co.* (Turkey Point Nuclear Plant, Units 3 and 4), CLI-01-17, 54 NRC 1, 10 (2001). The Atomic Safety and Licensing Board in another proceeding recently observed that, with a solitary exception,⁵⁵ it is “not aware of any . . . license renewal proceeding in which a contention relating in any way to emergency planning issues has been admitted.” *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Unit 1), LBP-07-11, 65 NRC 41, 95 (2007).

A contention concerned with the adequacy of evacuation planning does not relate to aging, and is beyond the scope of a license renewal proceeding. The Commission has clearly

⁵⁵ The sole exception was the admission of a contention challenging input data in a severe accident mitigation alternatives (“SAMA”) analysis related to evacuation times, economic consequences, and meteorological patterns. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 341 (2006). The Licensing Board recently granted a motion for summary disposition dismissing that contention. See *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-07-13, 66 NRC ____ (Oct. 30, 2007) (slip op.).

held that emergency planning contentions are beyond the permissible scope of a license renewal proceeding. For the foregoing reasons, PHASE Contention 18 is inadmissible and should be rejected.

PHASE Contention 19

Security Plans. Stakeholders contend that the way the force-on-force (FOF) tests are conducted do not prove that the Indian Point security force is capable to defend the facility against a credible terrorist attack or sabotage. The LRA does not address how Security, as required under section 10 CFR 100.12(f) and 10 CFR Part 73, will be managed during the proposed additional 20 years of operation against sabotage/terrorist forces with increasing access to sophisticated and advance weapons.

PHASE Petition at 149-50. In this contention, PHASE asserts that Entergy should not be granted a 20-year license renewal until it “substantially improve[s] security and develop[s] an aging management plan to maintain security.” *Id.* at 156-157. As the basis for this contention, PHASE asserts that the Design Basis Threat (DBT) is inadequate because it does not provide for protection against a large enough attacking force, the weapons and explosives listed in the Department of Energy’s (DOE) Adversary Capability List, or the realistic timing, location, and method of attack. *Id.* at 150-156.

Staff Response to PHASE Contention 19

The Staff opposes the admission of this contention on the grounds that it is outside the scope of license renewal and is thus inadmissible. Petitioners here do not challenge anything relating to license renewal and thus fail to show that a genuine dispute exists with the licensee on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). First, contentions dealing with security issues are “unrelated to ‘the detrimental effects of aging.’” *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 129 (2007). The Part 73 and Part 100 regulations are included in the definition of what constitutes a plant’s CLB and as

such continue in place into the term of extended operation. “Consequently, they are beyond the scope of, not ‘material’ to, and inadmissible in, a license renewal proceeding.” *Id.* at 129, quoting *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-26, 56 NRC 358, 364 (2002); see also 1991 Statement of Consideration, 56 Fed. Reg. at 64,967 (“the Commission concludes that a review of the adequacy of existing security plans is not necessary as part of the license renewal review process. The NRC has reviewed current requirements for physical protection and determined that they provide reasonable assurance that an adequate level of physical protection will exist at any reactor at any time in its operating lifetime.”).

Second, the Petitioners here are directly challenging the current security plans in place at Indian Point, and point to nothing in the LRA that speaks to any change in the security plans that would take place during the period of extended operation. This fails to establish an admissible issue here. See 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi). The Commission has stated that license renewal is not the appropriate venue for considering challenges to security plans. See *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 134, quoting *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-26, 56 NRC 358, 365 (2002).

Finally, this contention attempts to inappropriately challenge the DBT rule itself, which is also outside the scope of license renewal and constitutes an impermissible challenge to Commission regulations. See Staff Response PHASE Contention 6. Therefore, this contention is inadmissible.

PHASE Contention 20

The LRA does not satisfy the NRC's underlying mandate of Reasonable Assurance of Adequate Protection of Public Health and Safety.

PHASE Petition at 157. The Petitioners assert that the NRC has failed to take enforcement action against Entergy for a host of reasons relating to its alleged failure to meet the standard of reasonable assurance of adequate protection of public health and safety, and as such the LRA should be denied. *Id.* at 157-158. The Petitioners claim that the NRC should have taken actions against Entergy for failure to install a back-up powered siren system, failure to issue public notice regarding fire protection exemption, radioactive leaks, failure to build Indian Point to NRC guidelines, and inadequate emergency evacuation plans. *Id.* at 158-60. Further, they claim that the GEIS does not give adequate protection to the public health and safety with regard to the population surrounding Indian Point; the proximity of New York City and the West Point Military Academy to Indian Point; leakage of strontium-90 into the Hudson; location of Indian Point on the Ramapo Fault; overflight by one of the 9/11 hijacked planes over Indian Point; Indian Point as a target for terrorists; violations of NRC regulations including public requests for an ISA, failure of the siren system, inadequate siren volume, spent fuel pool leaks, conduit leaks, and an inability to locate leaks in the reactor cooling systems; underground radioactive plumes leaking towards the Hudson River; reactor vessel head corrosion; previous tube ruptures; holes in the steel roller bearings; failure of a steel containment plate; failure to meet current fire protection regulations and a request for another exemption; plans to turn Indian Point into a low level waste (LLW) storage site; permanent storage of spent fuel because Yucca Mountain has yet to be licensed; and inadequate funds in the decommissioning trust

fund. *Id.* at 160-65. For these reasons, Petitioners claim that Entergy fails to provide reasonable assurance of adequate protection to the public health and safety. *Id.* at 165.

Staff Response to PHASE Contention 20

The Staff opposes the admission of this contention. Most of the issues that the Petitioners bring up have nothing to do with the GEIS or the Supplement to the GEIS. The GEIS provides a standard format to review the environmental impact of nuclear power plant license renewal applications in accordance with NEPA. The GEIS review is broken up into two categories: Category 1 issues, where additional plant-specific mitigation measures are likely not to be sufficiently beneficial to warrant implementation; and Category 2 issues, for which additional plant-specific review is required. 10 C.F.R. Part 51, Appendix B, Table B-1. Most of the issues that the Petitioners list have nothing to do with a GEIS review, and either deal with current operating license safety concerns or are simply statements of complaint. The remaining issues that have anything to do with the GEIS—spent fuel storage and decommissioning—are Category 1 issues that are covered by the GEIS.

Also, although the Petitioners attempt to challenge the GEIS through their list of site specific attributes of Indian Point that make the GEIS inapplicable, they fail to seek a waiving of the regulations. Category 1 issues, by rule, are excluded from consideration in individual license renewal reviews, 10 C.F.R. § 51.53(c)(3)(i) and (iii), although this rule can be waived where “special circumstances . . . are such that the application of the rule or regulation . . . would not serve the purposes for which the rule was adopted.” *Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station) and *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 20 (2007) quoting 10 C.F.R. § 2.335(b). The Commission has stated that “[i]n theory,” approval would allow a contention on Category 1

issues to proceed where special circumstances have been found to exist. *Id.* However, the Petitioners' litany of supposed plant-specific issues that should be reviewed outside of the GEIS does not constitute a proper waiver request, and it does not include "an affidavit that identifies [and states with particularity] the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted." 10 C.F.R. § 2.335(b). Therefore this contention should not be admitted.

PHASE Contention 21

PHASE did not file Contention 21. See PHASE Petition at 165.

PHASE Contentions "22-25"

Indian Point was not required to comply with federally approved General Design Criteria, which constitutes a clear and flagrant violation of the Administrative Procedures Act, and Entergy's LRA fails to remediate the error, leaving Indian Point without adequate safety margins and the New York Metropolitan region without adequate assurance of protection of public health and safety.

PHASE Petition at 165. In support of these contentions, PHASE presents numerous arguments concerning the adequacy of the design criteria to which Indian Point Units 2 and 3 were designed. See *id.* at 166-187. PHASE alleges, *inter alia*, that the applicable design criteria are misstated in the FSAR, *id.* at 166; that the Atomic Energy Commission erred in its 1968 decision to approve Amendment 9 of the Unit 2 operating license, adopting the AIF's proposed modifications to the Draft GDC, *id.* at 167-73; that the Applicant was obliged, but failed, to meet the Draft GDC published by the AEC in July 1967, *id.* at 173-74; that the NRC's issuance of Bulletins, Orders, Generic Letters, and Regulatory Guides following the adoption of the Final GDC in 1971 violated the Administrative Procedures Act, and establish that compliance with the

Final GDC was required, *id.* at 175-78; that the FSAR fails to address and/or satisfy various requirements of the Final GDC, including GDC 10, 13, 19, 35, 45, and 69, *id.* at 178-83; and that the Applicant has failed to examine or replace reactor vessel internal components known to be susceptible to failure, *id.* at 182-83.

With respect to the Applicant's Aging Management Program ("AMP"), PHASE claims that the AMP is based on misstatements in the FSAR as to the applicable design criteria, *id.* at 166; that a commitment made by the Applicant to address reactor vessel internal components is "worthless," *id.* at 183-84; and that the Applicant's AMP and environmental program fail to consider a leaking "conduit" – which PHASE describes as a 20-inch pipe, *id.* at 184-85. In sum, PHASE alleges that the CLB for Indian Point Unit 2 is unknown, and that the LRA should therefore be denied, *id.* at 186.

Staff Response to PHASE Contention "22-25"

The Staff opposes the admission of this contention. Most of the issues raised in this contention pertain to the adequacy of the FSAR, and the design criteria to which Indian Point Unit 2, in particular, was designed. Those assertions, however, raise matters that pertain to the current operating license, and are thus outside the proper scope of this license renewal proceeding. See Response to New York AG Contentions 18 and 19.

While PHASE makes certain assertions in this contention regarding the Applicant's aging management program, those assertions fail to establish a litigable issue under 10 C.F.R. § 2.309(f)(1)(v) and (vi). Thus, PHASE provides no facts to support its generalized claim that the Applicant's aging management program is deficient. See PHASE Petition at 166. Further, PHASE's attempt to challenge a commitment made by the Applicant to address reactor vessel internal components lacks basis. In this regard, PHASE asserts that the Applicant has not

“examine[d] or replace[d] reactor core internal components that have known susceptibility to failure,” and instead “attempts to paint over the issue” with the following LRA commitment:

To manage loss of fracture toughness, cracking, change in dimensions (void swelling), and loss of preload in vessel internal components, the site will (1) participate in the industry programs for investigating and managing aging effects on reactor internals; (2) evaluate and implement the results of the industry programs as applicable to the reactor internals; and (3) upon completion of these programs, but not less than 24 months before entering the period of extended operation, submit an inspection plan for reactor internals to the NRC for review and approval.

PHASE Petition at 183-84, *citing* LRA § A.2.1.141. However, PHASE fails to recognize that this commitment restates *verbatim* a commitment which the NRC has found to be acceptable, such that “no further aging management review is required” if an applicant makes this commitment. See Standard Review Plan, NUREG-1800, § 3.1.3.2.6, at 3.1-12; GALL Report, § IV.B2. While PHASE asserts this commitment is “worthless”, it provides no reason to disturb the findings in the GALL Report or the guidance contained in the SRP, establishing that this commitment provides a sufficient basis to avert the need for further aging management review at this time.

Finally, PHASE’s assertion that the Applicant has failed to consider a leaking “conduit” in its LRA is lacking in basis. Contrary to PHASE’s assertion, this conduit is a channel between the refueling canal and the spent fuel storage pit, not a “20-inch pipe.” See UFSAR Figure 9.5-1, PHASE Petition at 184-85. Moreover, the conduit is addressed in the Applicant’s aging management program. See LRA Table 3.5.2-1, at 3.5-45 (refueling canal liner plate) and 3.5-47 (refuel canal slab and walls). PHASE has failed to allege any reason to believe the LRA’s treatment of this matter is deficient, and its assertion regarding this matter therefore fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(ii), (iv), (v), and (vi).

PHASE did not file Contention 26. See PHASE Petition at 186-87.

PHASE Contention 27

The LRA for Indian Point 2 & Indian Point 3 is insufficient in managing the environmental Equipment Qualification required by federal rules mandated that are required to mitigate numerous design basis accidents to avoid a reactor core melt.

PHASE Petition at 187. In support of PHASE Contention 27, PHASE states that the LRA does not address components required for renewal under 10 C.F.R. § 50.49(b)(1).⁵⁶ *Id.* PHASE states that the LRA does not subject EQ equipment to an aging management review, but instead EQ analyses are evaluated as TLAAs, while the Non-EQ Insulated Cables and Connections Program includes non-EQ electrical and I&C penetration cables and connections, and the Non-EQ Instrumentation Circuits Test Review Program includes review of calibration and surveillance testing results of instrumentation circuits. *Id.* at 187-88 (citing LRA Table 3.6.1 and LRA Section 4.4). PHASE alleges that these programs are not sufficient to demonstrate compliance with 10 C.F.R. § 50.49(e)(5) or with 10 C.F.R. Part 54. *Id.* at 188.

The remaining support for Contention 27 alleges that the NRC disregarded federal rules regarding Entergy's current licensing basis, and approved an alternative analysis for required equipment in violation of the Administrative Procedures Act ("APA"). *Id.* at 189. Following several pages of quotations from various regulations, PHASE states that the NRC violated the APA by accepting the LRA. *Id.* at 189-95. PHASE documents some of the investigations by the NRC and Brookhaven in 2002-2003 concerning post-LOCA cable performance. *Id.* at 195-99.

⁵⁶ 50.49(b)(1) requires that safety-related (or "Class 1E") electric equipment be covered by program for qualifying the electric equipment. 10 C.F.R. § 50.49(b)(1).

PHASE concludes that the NRC violated "Title 5, Part 1, Chapter 7 of the [APA] and that the problem has particular relevance to Indian Point 2 & Indian Point 3 license renewal as well as IP2 and 3's present ability to cope with certain design basis accidents." *Id.* at 200. In addition, PHASE states, "The following are multiple component examples required for safe shutdown of the IP2 & IP3 - which are presently unqualified and will apparently remain unqualified from Entergy statements in their LRA" – but PHASE fails to provide any such list of components. *Id.*⁵⁷

Staff Response to PHASE Contention 27

PHASE Contention 27 is not admissible. The contention fails to identify any error or omission in the application. It is vague and unfocussed, and thus fails to meet the requirements of § 2.309(f)(1)(i) and (vi), since it fails to identify a specific factual issue or show specific portions of the application that it disputes. Further, PHASE does not explain how 10 C.F.R. § 50.49(e)(5)⁵⁸ is violated, or why these assertions establish a dispute with the LRA. PHASE's allegations that the NRC violated the APA are clearly not matters for the Licensing Board to

⁵⁷ PHASE also states, "CONTENTIONS 4,5,6,7,8,9,10 are reference[d] and incorporate[d] in full as if set forth herein." PHASE Petition at 201. However, PHASE does not explain the relevance of these contentions to PHASE Contention 27.

⁵⁸ 10 C.F.R. § 50.49(e) states that the electric EQ program must include and be based on, among other things:

(5) Aging. Equipment qualified by test must be preconditioned by natural or artificial (accelerated) aging to its end-of-installed life condition. Consideration must be given to all significant types of degradation which can have an effect on the functional capability of the equipment. If preconditioning to an end-of-installed life condition is not practicable, the equipment may be preconditioned to a shorter designated life. The equipment must be replaced or refurbished at the end of this designated life unless ongoing qualification demonstrates that the item has additional life.

address, as they are not issues related to managing the effects of aging nor are they disputes with the application; these assertions fail to establish a litigable issue in this proceeding.

Finally, to the extent that Contention 27 challenges what electrical equipment is considered to be safety-related and how compliance with 10 C.F.R. § 50.49(b)(1) is shown, such a challenge is a current-compliance operating reactor issue, and is not subject to a renewal review, pursuant to 10 C.F.R. § 54.30. The contention should therefore be rejected.

PHASE Contention 28 - 32⁵⁹

The License's ineffective Quality Assurance Program violates fundamental independence requirements of Appendix B, and its ineffectiveness furthermore triggered significant cross cutting events during the past eight months that also indicate a broken Corrective Action Program, and failure of the Design Control Program, and as a result invalidate statements crediting these programs that are relied upon in the LRA.

Phase Petition at 202. The Petitioners assert that the Applicant's ineffective Quality Assurance Program violates fundamental independence requirements of 10 C.F.R Part 50, Appendix B, and that the QA program's ineffectiveness triggered significant cross cutting events during the past eight months that also indicate a broken Corrective Action Program, and failure of the Design Control Program. To support these assertions, the Petitioners cite various programs and certain shortfalls, such as a design control breakdown that allegedly resulted in contaminated coolant spillage of 385-500 gallons, and incorrect sections of piping cut during plant modifications. (Exhibit JJJ). PHASE asserts that the alleged reduction in Quality Control directly impacts the proposed 20 year new superseding license and that the current condition of

⁵⁹ PHASE presents Contention 28, and then presents additional basic statements in support of this contention, as its Contentions 29-32, rather than setting forth separate contention statements.

the plant will continue to decline under this new system, even more than other Entergy plants, and that the NRC must deny the LRA because it contains an ineffective Quality Assurance Program for Aging Management. Petition at 205.

PHASE Contention 29: In this "contention," PHASE incorporates Contention 28 and provides an example of a QA failure involving an attempt to clear interference of sumps on March 7, 2007. PHASE Petition at 205-206.

PHASE Contention 30: Here, PHASE again incorporates Contention 28, and alleges a second example of an ineffective quality assurance program involving a failure to detect a trend of deficient procedures associated with temporary modifications that affected normal control lighting power. *Id.* at 206-207.

PHASE Contention 31: PHASE again incorporates Contention 28, and alleges a third failure of the QA program involving a failure to establish adequate corrective actions associated with monitoring of the service intake bay level. *Id.* at 207.

PHASE Contention 32: Again, PHASE incorporates Contention 28 and alleges a fourth example of QA program failures, involving a safety culture assessment result set was apparently not entered into the corrective action program in 2006. *Id.* at 208.

Staff Response to PHASE Contentions 28 - 32

PHASE Contentions 28-32 are inadmissible. A review of these contentions confirms the Petitioners' assessment that the contentions pertain to compliance with various quality assurance issues and compliance with regulations under current operations. See PHASE Petition at 203. As such, these issues concern the current license, rather than license renewal. The Petition fails to demonstrate that the issues raised in these contentions are within the scope of this license renewal proceeding; fails to demonstrate that the issues raised in the contentions are material to the findings the NRC must make to support the license renewal action; and fails

to provide sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact in this proceeding. The contentions are plainly outside the scope of the proceeding as they do not raise any aspect of the applicants' aging management review. See *Turkey Point*, CLI-01-17, 54 NRC at 10. In particular, they fail to show that current compliance is material to the findings the NRC must make for granting or denying license renewal.

The PHASE Petition argues that a challenge to current regulatory compliance is permitted in a license renewal proceeding. PHASE Petition at 205, 208. This is incorrect. The Petitioners offer absolutely no case authority or reference to a regulation to support the assertions regarding their ability to challenge regulatory compliance here. Furthermore, the 1991 Statement of Consideration issued for the license renewal rulemaking explicitly states that the rule "does not require submission of information relating to the adequacy of, or compliance with, the current licensing basis." 56 Fed. Reg. at 64,961. Therefore, any argument regarding the continued violation of the plant's current licensing basis or other compliance issues is not material to the findings the NRC must make, and the Petitioners' argument fails the materiality requirement of 10 C.F.R. § 2.309(f)(1)(iv). As the Commission has stated, "the Commission does not contend that all reactors are in full compliance with their respective CLBs on a continuous basis. Rather, as discussed in the Statement of Consideration for the previous rule, the regulatory process provides reasonable assurance that there is compliance with the CLB. The NRC conducts its inspection and enforcement activities under the presumption that non-compliances will occur." 1995 Statement of Consideration, 60 Fed. Reg. at 22,473-74. Accordingly, inasmuch as these contentions address current compliance and fail to raise a matter that is properly within the scope of this license renewal proceeding, they should be rejected. The failure of a proposed contention to demonstrate that the issue is within the scope

of the proceeding is grounds for its dismissal. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 567 (2005).

PHASE Contention 33

The EIS Supplemental Site Specific Report of the LRA is misleading and incomplete because it fails to include refurbishment plans meeting the mandates of NEPA, 10 CFR 51.53 post-construction environmental reports and of 10 CFR 51.21.

PHASE Petition at 208. In support of this contention, PHASE provided Exhibit DD, indicating that Westinghouse has made unspecified arrangements with Doosan Heavy Industries Construction Co., Ltd. (“Doosan”) to provide reactor vessel heads and control rod drive mechanisms for IP2 and IP3. The Petitioners further allege deliberate misconduct on the part of Entergy in allegedly failing to address refurbishment impacts in Appendix E to the LRA. Petitioners further allege that the LRA is “misleading,” *id.* at 208; that the Applicant attempts “to omit relevant information in the LRA which directly impacts the aging management plans,” *id.* at 211; and that the “the omission by the Applicant was not an oversight.” *id.* at 213.⁶⁰

Staff Response to PHASE Contention 33

The Staff does not oppose the admission of PHASE Contention 33 for the limited purpose of verifying whether the Applicant has omitted plans to replace the reactor vessel head as a refurbishment item associated with license renewal.⁶¹ The Petitioners correctly note that

⁶⁰ Petitioners also claim previous misconduct by Entergy using excerpts from six alleged previous Entergy LRAs. PHASE Petition at 217-18. Those examples include four Entergy LRAs and two LRAs from plants owned and operated by other licensees (Wolf Creek Generating Station and Brunswick Steam Electric Plant).

⁶¹ The NRC Staff has issued a request for additional information on this subject. See Environmental RAI 3 in “Request for Additional Information (RAI) Regarding the Environmental Review For the Indian Point (continued. . .)

10 C.F.R. § 51.53 requires that an Applicant's environmental report include analyses of Category 2 (site-specific) impacts from refurbishment associated with license. Furthermore, 10 C.F.R. § 51.95(c)(4) requires that the NRC Staff shall rely on, among other factors, information developed to address matters identified as Category 2 issues in 10 C.F.R. § 51.53, when determining whether license renewal is environmentally acceptable. Thus, the contention is material to the proceeding.⁶² Notwithstanding this conclusion, the Staff opposes the admission of Petitioners allegations of deliberate misconduct by the Applicant as speculative and failing to state an issue appropriate for litigation in this proceeding. Petitioners base these assertions on Entergy's extensive previous experience in license renewal and an appeal to "common sense" understandings of the effort necessary to maintain concrete and steel structures. PHASE Petition at 213, 218. These assertions fail to provide factual basis in support of the Petitioners' claims.

(. . .continued)

Nuclear Generating Unit Nos. 2 And 3 License Renewal Application," December 5, 2007, (ADAMS Accession No. ML073330931). A response to this RAI was provided by Entergy, by letter dated January 4, 2008 (ADAMS Accession No. ML080110372).

⁶² The Petitioners mistake the NRC's definition of refurbishment, quoting from the Supplement 2 to the GEIS, regarding the *Oconee* plant. See Petition at 221-22. While partially quoting the Staff response intended to clarify the difference between component replacement and refurbishment, the Petitioners omit a material portion of that statement. The Staff actually stated, "refurbishment describes an activity or change . . . needed to support operations during the renewal term, *but that was not previously considered in an environmental document*. GEIS Supplement 2 at A-11; emphasis added. The Staff note that:

"Refurbishment in the context of license renewal does not refer to routine activities at the component level, such as repairs, replacement or reconditioning of individual components, pipe segments, and concrete walls. These activities will continue during the initial license period and are anticipated to occur during the 20-year license renewal period."

Id.

PHASE Contention 34

Stakeholders contend that accidents involving the breakdown of certain in scope parts, components and systems are not adequately addressed [sic] Entergy's LRA for Indian Point 2 and Indian Point 3.

PHASE Petition at 226. In support of this contention, the petition identifies a number of parts, components, systems and issues, and claims that accident pathways for these items must be discussed in the LRA or that aging management plans for the items are inadequate or nonexistent. *Id.* at 227-233.

Staff Response to PHASE Contention 34

The Staff opposes the admission of this contention. As a general matter, the contention asserts that accidents involving specific items must be addressed in the application. PHASE, however, fails to cite any support for that proposition. In fact, 10 C.F.R. §§ 54.4 and 54.21 identify what must be addressed in the application -- and those regulations do not include a requirement that accidents involving the items listed by PHASE be addressed in the application. As the Licensing Board stated in *Turkey Point*, a petitioner in a license renewal proceeding cannot expand the regulatory requirements. *Florida Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-01-6, 53 NRC 138, 159, *aff'd* CLI-01-17, 54 NRC 3 (2001).

In addition, portions of the contention lack basis and specificity; others raise issues that are beyond the scope of the environmental report, while other issues raised are beyond the scope of license renewal or are speculative or based on erroneous premises. In this regard, PHASE asserts that the LRA's aging management plan does not fully address: boric acid

corrosion, reactor vessel internals bolting, the [control rod drive system],⁶³ the main feedwater pump system, the reactor water coolant system, cable degradation, embrittlement, primary water stress corrosion cracking, metal fatigue, severe accidents, and flow-accelerated corrosion. PHASE Petition at 227-232. All of these items are discussed in the LRA, however, and PHASE has not identified any deficiencies in the LRA's discussion of these systems. PHASE's contention with respect to these items thus lacks basis and specificity, and fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v)-(vi).

PHASE also asserts, without stating any basis or support, that the "LRA Environmental Supplement"⁶⁴ fails to address: obsolescence concerns for original equipment, rod control logic and power cabinets; flow-accelerated corrosion; problems securing spare parts; a shortage of seasoned engineers; and premature failure of containment coatings. PHASE Petition at 231-232. Because PHASE has not stated any basis and has provided no support for these claims, these portions of the contention are inadmissible. In addition, some parts of the contention lack specificity and others are inadmissible in that they are speculative. *See id.* Finally, some parts of the contention raise technical issues (for example, statements concerning original equipment, rod control logic and power cabinets, and flow-accelerated corrosion) and are outside of the scope of matters required to be addressed in an environmental report, while others (like the alleged problem of securing spare parts and the shortage of seasoned engineers) are simply

⁶³ PHASE at Contention 34(c) states that the LRA fails to address fully the "fuel rod control system" but there is no such term in the application. The Staff assumes that PHASE has mistakenly used the term and intended to refer to "the control rod drive system."

⁶⁴ In this contention, PHASE makes numerous references to the "LRA Environmental Supplement." But there is no "LRA Environmental Supplement". The Staff assumes that PHASE meant to refer to the Applicant's Environmental Report ("ER").

beyond the scope of license renewal. Finally, no basis appears for PHASE's assertion that the use of briny water as reactor coolant must be addressed in the LRA, *id.* at 229. This appears to be based on an erroneous premise, as briny water is not used as reactor coolant water. See Unit IP2 USFAR § 4.1.1. and Unit IP3 USFAR § 4.1.1.

In sum, this contention lacks adequate factual and legal basis, and fails to demonstrate the existence of a genuine dispute of material fact, as required by 10 C.F.R. § 2.309(f)(1)(iii) – (vi).

PHASE Contention 35

Leak-Before-Break analysis is unreliable for welds associated with high energy line piping containing certain alloys at Indian Point 2 & Indian & Indian Pont 3. [sic]

PHASE Petition at 234. The Petitioners contend that the Leak-Before-Break (LBB) analysis in Applicant's LRA is unreliable and does not provide an adequate aging management plan. Further, they assert that LBB relaxes requirements against double-edge guillotine breaks, and fails to provide an adequate means to protect against pipe breaks.

To support this contention, the Petitioners cite pipe integrity problems experienced at Indian Point Units 2 & 3, citing a Journal News article of September 20, 2005. PHASE Petition at 234-35. Furthermore, the Petitioners contend that the NRC and Entergy notified the public that radioactive water is leaking from IP2's spent fuel pool, without identifying the specific weld areas within the spent fuel pool that it wishes to address. The Petitioners also proffer Mr. Ulrich Witte as an expert for this contention.

Staff Response to PHASE Contention 35

The Staff opposes the admission of this proposed contention on the grounds that it lacks basis, is outside the scope of this license renewal proceeding, the issue raised is not material to

the findings the NRC must make to support a license renewal decision, and there is not sufficient information to show that a genuine dispute exists on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(ii), (iii),(iv), and (vi) and it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309. The Petitioners' reliance on vague data and information regarding the excavation and discovery of leaks do not provide sufficient information to show that there are material issues of fact in dispute.⁶⁵ The Petitioners' asserted bases for the proposed contention lack sufficient facts and the supporting expert opinion adds little to satisfy 10 C.F.R. § 2.309(f)(1)(v).⁶⁶ In this regard, "[m]ere 'notice pleading' is insufficient. A petitioner's issue will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation.'" ⁶⁷

In addition, PHASE Contention 35 is incorrect in its assertions, inasmuch as the LRA at Section 4.7.2 (Leak Before Break (LBB) Analyses) does evaluate postulated flaw growth in piping. These analyses consider the thermal aging of the cast austenitic stainless steel ("CASS") piping and fatigue transients that drive flaw growth over the operating life of the plant. Because these two considerations could be influenced by time, LBB analyses are identified as potential TLAA. The structural design of IP2 considered and protected against the effect of

⁶⁵ The provisions of 10 CFR 2.309(f)(1)(ii),(v), and (vi) (formerly 2.714(b)(2)(i), (ii),and (iii)) were specifically added by the Commission "to raise the threshold bar for an admissible contention," and prohibit "notice pleading, with the details to be filled in later" and "vague, un[-]particularized contentions." *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334, 338 (1999); *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Stations, Units 2 and 3), LBP-01-10, 53 NRC 273 (2001).

⁶⁶ Although the Petitioners refer to Mr. Witte's declaration, this statement pertains to another contention (i.e., PHASE Contention 20).

⁶⁷ *Fansteel, Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003) *citing GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000).

postulated reactor coolant loop pipe ruptures. The LBB analyses have been documented in WCAP-10977, WCAP-10977 Supplement 1, and WCAP-10931. The time-related assumptions in the analyses include the thermal aging of CASS and the fatigue crack growth analysis. Similarly, the structural design of IP3 considered and protected against the effect of postulated reactor coolant loop pipe ruptures. LBB analyses have been documented in Appendix A of WCAP-8228.

The time-related assumptions in the analyses include the thermal aging of CASS and the fatigue crack growth analysis. The first analysis consideration that could be influenced by time is the material properties of CASS used in the pipe fittings. In the LRA, the applicant evaluates this consideration and concludes that it does not have a material property time-dependency and this aspect is not considered TLAA. The second analysis consideration that could be influenced by time is the accumulation of actual fatigue transient cycles. As noted in LRA § 4.3.1, the projections for 60 years of operation indicate that the numbers of significant transients for IP2 or IP3 will not exceed the design analyzed values. Thus the applicant concluded that the IP2 and IP3 analyses will remain valid during the period of extended operation in accordance with 10 C.F.R. § 54.21(c)(1)(i).

Therefore, the LRA has addressed the two portions of the leak-before-break analysis that could be affected by time. 10 C.F.R. § 54.3 defines TLAA as calculations and analyses that involve time-limited assumptions defined by the current operating term. For thermal aging of CASS, the Applicant has determined that there is not material property time-dependency; therefore, this portion of the LBB analysis is not a TLAA. For fatigue crack growth, the Applicant determined that this is a TLAA, but that the number of cycles projected for 60 years will not exceed the number analyzed for the current 40 year term. This meets the review guidance in Section 4.7.3.1.1 of NUREG-1800, Rev. 1, which states:

Justification provided by the Applicant is reviewed to verify that the existing analyses are valid for the period of extended operation. The existing analyses should be shown to be bounding even during the period of extended operation.

The Applicant has provided the justification in the application as indicated by the NRC Staff's review guidance.

Furthermore, the piping cited in recent news reports is part of the CLB, and is not part of piping systems for which Indian Point has been granted approval of the LBB analyses.

Therefore, the Petitioners have not shown that piping systems which are typically the subject of LBB have been or are leaking. At IP2 and IP3, the NRC has approved LBB for only the reactor coolant system piping, *i.e.*, the piping from the outlet (including nozzle) of the reactor vessel to the steam generators (hot leg), the piping from the steam generators to the reactor coolant pumps (cross over leg), and the reactor coolant pumps to the inlet (including nozzle) of the reactor vessel (cold leg). Section 4.7 of NUREG-1800, Rev. 1 ("Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants") provides the staff with review guidance for other plant-specific time-limited aging analyses, one of which may be leak-before-break.

In addition, the Petitioners assert that the locations of piping systems that are susceptible to stress corrosion cracking (SCC) may not qualify for LBB relief but the Applicant's LRA does not respond to the potential safety threat of stress corrosion of weld alloys. PHASE Petition at 237. However, the Applicant does address SCC for the Reactor Coolant System susceptible piping and welds. See LRA Tables 3.1.2-3-IP2 and 3.1.2.-3 – IP3, and LRA §§ 3.1.2.2.7 and 3.1.2.2.13. Also the LBB analyses were not originally required to address SCC, as these current issues meet § 54.30 requirements; this is part of a current compliance issue, and is not a part of the license renewal proceeding. Finally, the issue of

primary water stress corrosion cracking (PWSCC) in dissimilar metal (DM) butt welds of operating PWRs is currently being addressed by the industry, and is being evaluated and monitored by the staff as a current operating plant issue. The issue of PWSCC, and its potential impact on piping which has been approved for LBB, is outside the scope of license renewal.

In sum, this Contention fails to raise a valid issue as the LRA addresses the matters required to be considered for license renewal, and the contention fails to demonstrate a deficiency in the application. As has previously been noted in other proceedings,⁶⁸ to intervene in an NRC proceeding, a Petitioner must submit a contention meeting the requirements of 10 C.F.R. § 2.309(f)(1). Failure of a contention to meet any of the requirements of § 2.309(f)(1) is grounds for its dismissal.⁶⁹ In its Statement of Consideration adopting a revision of the rules in 10 C.F.R. Part 2, the Commission reiterated the same principles that were previously applicable; namely, that “[t]he threshold standard is necessary to ensure that hearings cover only genuine and pertinent issues of concern and that the issues are framed and supported concisely enough at the outset to ensure that the proceedings are effective and focused on real, concrete issues.”⁷⁰

The Petitioners have failed to show an adequate basis for any portion of this contention, nor have they provided an expert to support the contention. In commenting on the requirement

⁶⁸ See, e.g., *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 272-74 (2006), *aff'd* CLI-07-3, 65 NRC 13, *reconsid. denied*, CLI-07-13, 65 NRC 211 (2007); *PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 302-12 (2007).

⁶⁹ See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); *Arizona Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

⁷⁰ Changes to Adjudicatory Process, 69 Fed. Reg. at 2189-90 (Jan. 14, 2004).

of 10 C.F.R. § 2.309(f)(1)(vi) that a Petitioner “provide sufficient information to show . . . a genuine dispute . . . with the Applicant . . . on a material issue of law or fact,” the Commission has stated that the Petitioner must “read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the Applicant’s position and the Petitioner’s opposing view,” and explain why it disagrees with the Applicant.⁷¹ In accordance with 10 C.F.R. § 2.309(f)(1)(v), the Petitioners have failed to “[p]rovide a concise statement of the alleged facts or expert opinions which support the requestor’s/Petitioner’s position on the issue and on which the Petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/Petitioner intends to rely to support its position on the issue.” A contention that does not directly controvert a position taken by the Applicant in the application is subject to dismissal.⁷² Furthermore, an allegation that some aspect of a license application is “inadequate” or “unacceptable” does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect.⁷³ This has not been done by the Petitioners here.

Therefore, for the reasons stated above PHASE Contention 35 is inadmissible.

PHASE Contention 36

⁷¹ Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,170 (Aug. 11, 1989).; *Millstone*, CLI-01-24, 54 NRC at 358.

⁷² See *Texas Utils. Elec. Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

⁷³ See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 & n.12 (1990).

Stakeholders assert that the LRA for Indian Point 2 and Indian Point 3 does not include an adequate plan to monitor and manage aging of plant piping due to Flow-Accelerated Corrosion (FAC), as required pursuant to 10 C.F.R. § 54.21(a)(3) through 60 year old piping, during the proposed 20 year new license. The plant piping is subject to aging management review, pursuant to 10 C.F.R. § 54.21(a), and FAC is an aging phenomenon that must be adequately managed. See NUREG-1801, *Generic Aging Lessons Learned (GALL) Report*, Revision 1, U.S. Nuclear Regulatory Commission. Stakeholders submit the Declaration of Mr. Ulrich Witte in support of this contention.

PHASE Petition at 239. As a basis for this contention, PHASE asserts that based on the proposed program to monitor and manage FAC, Entergy cannot assure the public that the minimum wall thickness of carbon steel piping and valve components will not be reduced by FAC to below ASME code limits during the period of extended operation. PHASE further alleges that wear limits acceptance criteria are inconsistent with industry guidance and precedent regarding LRA acceptance, and Safety Evaluation Report (SER) approval for other facilities. *Id.* at 243. Therefore, PHASE asserts that the NRC must deny approval of the Applicant's LRA, because it does not include an adequate plan to monitor and manage the pipe FAC as required by 10 C.F.R. § 54.21(a)(3) and 10 C.F.R. Part 50, and because Entergy proposes to use CHECWORKS and includes only a limited amount of piping within the scope of the program. *Id.* at 242.

PHASE relies on the Declaration of Mr. Ulrich Witte to support this Contention, and a statement made at an Advisory Committee on Reactor Safeguards ("ACRS") Thermal Hydraulic Phenomena Subcommittee meeting on January 26, 2003 to support PHASE's assertion that the use of the computer model, CHECWORKS, is not reliable in determining the scope and frequency of in-service inspections of components susceptible to FAC. See Petition at 240-41. Furthermore, PHASE alleges that the 5% uprate at Unit 2 (in 2004) and the changes in plant parameters are such that the CHECWORKS model cannot be used to determine the inspection

frequency without 10 or more years of inspection data. PHASE further alleges that Entergy has a history of broken pipes due to corrosion, and alleges without any substantiation that Entergy's wear limits acceptance criteria are inconsistent with industry guidance and precedents. *Id.* at 242-43.

Staff Response to PHASE Contention 36

In essence, the issue raised by this contention is whether use of CHECWORKS is appropriate to determine the scope and frequency of inspections to manage aging effects caused by FAC. However, Mr. Witte's assertion that 10 plus years of site-specific inspection data is required for CHECWORKS is unsupported and provides no basis for this contention. "[N]either mere speculation nor bare or conclusory assertions, *even by an expert*, . . . will suffice to allow admission of a proffered contention." *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 241(2004). A petitioner's failure to provide an explanation regarding the bases for a proffered contention requires that it be rejected. *Id.* at 242 (citing *Arizona Public Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 & 3), CLI-91-12, 34 NRC 149, 155 (1991)). Furthermore, the GALL Report indicates that CHECWORKS was developed and benchmarked using data from many plants and that the model is used to identify the most susceptible locations within a given piping system. See GALL Report, Section XI.M17, at X1 M-61 – X1 M-62.

Entergy states that, consistent with GALL, NUREG-1801, Section XI.m17, its flow-accelerated corrosion program is based on EPRI Report NSAC-202L-R2 guidelines for an effective program that predicts, detects, and monitors FAC in plant piping and other pressure retaining components. See *LRA*, Appendix B, B.1.15 at B-54. The GALL Report also indicates that the FAC program relies on the foregoing EPRI guidelines and that CHECWORKS is acceptable because it provides a bounding analysis for FAC, in which an inspection schedule

based on the CHECWORKS results provides reasonable assurance that structural integrity will be maintained between inspections. See GALL Report at XI M-61 to XI M-62. Mr. Witte's opinions (which do not even address this issue) do not provide an adequate basis to question the commonly accepted use of CHECWORKS. Therefore, the contention does not raise a genuine dispute concerning the Application and should be rejected.

PHASE's Contention 36 makes various vague assertions, but makes no attempt to identify or to support its assertion that any particular systems or components that are related to license renewal do not have an adequate aging management plan. Rather the Petitioners merely list a number of systems they believe are affected in a significant way by FAC, or because of the EPU, that the use of CHECWORKS will not be useful. Without any specific identification of systems and components alleged to be inadequately managed, PHASE has failed to meet the requirement to state its contention with particularity, and has failed to meet its burden of demonstrating the contention's materiality.

In addition, PHASE fails to demonstrate that its concerns about CHECWORKS have any basis or would materially affect the adequacy of the FAC program at Indian Point Units 2 and 3. Neither PHASE nor Mr. Witte shows any familiarity with how CHECWORKS is used in this FAC program, but merely infer its use from the Application. In fact, CHECWORKS is a tool to identify the highly susceptible areas, which is then used with trend data from actual inspections, operating experience and engineering judgment. Thus, CHECWORKS is only a tool that is considered among other factors. See GALL Report, at § X1.M17 at X1 M-61 – X1 M-62.

Further, PHASE does not provide any real basis indicating that CHECWORKS cannot be used after the EPU. Neither PHASE nor Witte provide any basis for this assertion.

Unsupported conclusory assertions, even by an expert, cannot support the admission of a proffered contention. *Calvert Cliffs*, CLI-98-14, 48 N.R.C. 41 (1998), *Fansteel*, CLI-03-13, 58

N.R.C. 195, 203 (2003). A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 N.R.C. 281, 305, vacated in part and remanded on other grounds, CLI-95-10, 42 N.R.C. 1, *aff'd in part*, CLI-95-12, 42 N.R.C. 111 (1995). Where a petitioner has failed to do so, "the [Licensing] Board may not make factual inferences on [the] petitioner's behalf." *Id.*, *citing Palo Verde*, CLI-91-12, 34 N.R.C. 149. *See also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 N.R.C. 142, 180 (1998). Further, neither PHASE nor Witte addresses the conservatism in CHECWORKS. The GALL Report states that CHECWORKS is acceptable because it provides a bounding analysis for FAC, and was developed and benchmarked using data obtained from many plants. NUREG-1801 at XI M-61 - M-62 (emphasis added). PHASE provides no basis, other than unsupported assertions, to dispute these conclusions.

Finally, the Petitioners' reliance on statements taken out of context from an ACRS proceeding,⁷⁴ even if the statements were on point, do not support their claim. PHASE took the

⁷⁴ In this regard, Mr. Aleksick clarified the statement that PHASE relies upon, by stating:

Some runs results are imprecise and some more precise. And we look at both accuracy and precision. Programmatically we account for that, that reality, by treating those runs that have what we call well 25 calibrated results, i.e., precise and accurate results coming out of the model that are substantiated by 2 observations, we treat those piping segments; differently programmatically than we do areas where the model is less good. If the model results do not correlate well with reality, different actions are taken primarily increased inspection coverage to increase our level of confidence that those systems can continue to operate safely. In addition to the CHECWORKS results many other factors are considered to assure that the

(continued. . .)

ACRS hearing out of context, ignored the specific wear rates projected in the EPU proceeding, and ignored the increased inspection activities that are being implemented. PHASE made no attempt to address or identify any error in this information, which is publicly available on ADAMS. Therefore, PHASE Contention 36 does not raise a genuine, material dispute and should be rejected.

PHASE Contention 37

The LRA and the USFARs for Indian Point inadequately address the currently existing (known and unknown) environmental effects and aging degradation issues of ongoing leaks, and fail to lay out workable aging management plans and critical safety systems.

PHASE Petition at 244. PHASE asserts that the LRA for Indian Point Units 2 & 3 fails to lay out, in detail, a workable aging management plan to deal with accidental leaks in the underground pipes, steam pipes and other systems critical to safe shutdown and cooling of the reactor, and cooling of the spent fuel pools. *Id.* Further it claims that the LRA and the UFSAR's for IP2 & IP3 inadequately address the currently existing environmental effects (both known and unknown) of recent and ongoing leaks, and fails to present a workable aging management plan for leaks,

(. . .continued)

pipng retains its integrity, chief among these are industry experience as exchanged through the EPRI sponsored CHUG group. Plant experience local to Waterford in this case. And the FAC program owner maintains an awareness of the operational status of the plant so that, for example, modifications or operational changes that occur are taken into account in the inspection of the secondary site FAC susceptible piping.
(*emphasis added*)

See Statement of January 26, 2005, at 244-46 (ADAMS Accession No. ML042505932).

including but not limited to, a plan for locating, stopping and remediating current and future leaks during the proposed 20 year new license period. *Id.* PHASE further contends that the LRA for Indian Point Units 2 and 3 fails to include an adequate aging management plan as required by 10 C.F.R. § 54.21(a)(3) for piping, and that such piping is currently leaking radioactive effluent after only 30 years of usage. *Id.* at 245, 261.

To support its contention, the Petitioners cite newspaper articles and press releases, and allege that unplanned, unmonitored leaks of liquid radioactive effluents, including tritium, strontium 90 and cesium 137, have leaked and are leaking from Indian Point into the groundwater and Hudson River (“Radiation Leaks”). The Petitioners further allege that radiation leaks have been discovered throughout the Indian Point 1, 2, and 3 complex, and without any support, they allege that the leaks result from a multitude of separate onsite systems, structures and components. PHASE Petition at 246. In support of this contention, PHASE cites news articles, press releases and the Declaration of Mr. Ulrich Witte.

Staff Response to PHASE Contention 37

The Staff opposes the admission of this proposed contention on the grounds that there is not sufficient information to show that a genuine dispute exists on a material issue of law or fact, as required by 10 C.F.R. §§ 2.309(f)(1)(iii),(iv),(vi), it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309 and it is overly vague. Moreover, the Petitioners failed to support this contention with the required factual or expert supporting information. See 10 C.F.R. § 2.309(f)(1)(ii), (v).⁷⁵ In this regard, “[m]ere ‘notice pleading’ is insufficient. A

⁷⁵ 10 CFR § 2.309(f)(1)(v) (formerly 2.714(b)(2)(ii)) now specifically requires a Petitioner to provide a concise statement of the alleged facts or expert opinion which support its proposed contention, together with references to those specific sources and documents of which the Petitioner is aware, and on which (continued. . .)

petitioner's issue will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation.'" ⁷⁶

The Petitioners' references to leaks in the LRA are unsupported, poorly stated, vague and ambiguous. For example, they state, "The reactor's coolant pump seal provides a critical leakage barrier between the pressure boundary and numerous rotating parts that seals the pressurized reactor used in primary coolant systems." PHASE Petition at 246. The provisions of 10 C.F.R. § 2.309(f)(1)(ii),(v), and (vi) (formerly § 2.714(b)(2)(i), (ii),and (iii)) were specifically added by the Commission "to raise the threshold bar for an admissible contention," and to prohibit "notice pleading, with the details to be filled in later" and "vague, un[-]particularized contentions." *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334, 338 (1999); *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-01-10, 53 NRC 273 (2001). Additional unsupported, ambiguous and vague statements, such as "[t]he LRA for IP2 & IP 3 fails to provide adequate proof of a proper safety analysis of this critical seal" and "[t]he LRA also fails to provide a detailed aging management plan, despite industry knowledge of leakage associated with this critical component", PHASE Petition at 247, similarly fail to provide a specific basis for the contention. Moreover, while the reactor coolant pump (RCP) seal is a vital component, it is not subject to an aging management

(. . .continued)

the Petitioner intends to rely to establish those facts or expert opinion. *Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), LBP-94-22, 40 NRC 37, 39 (1994). Here, the Petitioners cite the Declaration of Mr. Witte – but that Declaration does not relate to this contention.

⁷⁶ *Fansteel, Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (citing *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)).

review, per 10 C.F.R. § 54.21(a)(1)(i).⁷⁷ Furthermore, there is no requirement for the Applicant to discuss leaks other than in the operating history portion of the aging management programs, and since the Petitioners have not identified which program they are referring to, their contention is vague and ambiguous.

Furthermore, in the LRA, the Applicant states that the feedwater heater is outside the scope of license renewal. The Petitioners disagree and contend that the feedwater heater is a crucial component in maintaining thermal performance. PHASE Petition at 247. However, the Petitioners have not specified which of the various feedwater heaters should be in scope, nor have they attempted to frame their discussion within the requirements of 10 C.F.R. § 54.4.

The Petitioners also contend that the life expectancy of stainless steel pipes may be as little as 20 years without proper chemistry controls; that cumulative usage factors may be improperly analyzed; that Entergy's aging management plan provides no detailed explanation regarding the adequate management of chemistry, or fundamental maintained requirements

⁷⁷ 10 CFR 54.21(a)(1)(i) states that each application must contain the following information:

(a) An integrated plant assessment (IPA). The IPA must, (1) For those systems, structures, and components within the scope of this part, as delineated in § 54.4, identify and list those structures and components subject to an aging management review. Structures and components subject to an aging management review shall encompass those structures and components, (i) That perform an intended function, as described in § 54.4, without moving parts or without a change in configuration or properties. These structures and components include, but are not limited to, the reactor vessel, the reactor coolant system pressure boundary, steam generators, the pressurizer, piping, pump casings, valve bodies, the core shroud, component supports, pressure retaining boundaries, heat exchangers, ventilation ducts, the containment, the containment liner, electrical and mechanical penetrations, equipment hatches, seismic Category I structures, electrical cables and connections, cable trays, and electrical cabinets, excluding, but not limited to, pumps (except casing), valves (except body), motors, diesel generators, air compressors, snubbers, the control rod drive, ventilation dampers, pressure transmitters, pressure indicators, water level indicators, switchgears, cooling fans, transistors, batteries, breakers, relays, switches, power inverters, circuit boards, battery chargers, and power supplies;

Id., emphasis added.

such as those required in 10 C.F.R. § 50.65; that Entergy has made no commitments that provide a viable and workable pipe or component replacement strategy for key component pipes needed for the cooling and safe shutdown of the reactor during the superseding license period; and that stainless and carbon alloy pipes are cracking and breaking at Indian Point 2 and Indian Point 3. Petition at 247-48.

These assertions are vague and unfounded. The Applicant has included several aging management programs which address water chemistry including, but not limited to, Water Chemistry Control - Auxiliary Systems, Water Chemistry Control - Closed Cooling Water, and Water Chemistry - Primary and Secondary. See LRA at B-129, B-133 and B-137. Furthermore, there is no requirement in 10 C.F.R. Part 54 that the Applicant must provide a "viable and workable pipe or component replacement strategy" for key component pipes needed for the cooling and safe shutdown of the reactor during the 20 year new superseding license period. Lastly, the "conduit" to which Phase is referring is not a "pipe"; it is a structure, and the structure in question is addressed in the LRA. See LRA Table 2.4-1. (Refueling canal liner plate and Refuel canal slab and walls).

Furthermore, the Petitioners' assertion that the LRA for Indian Point 2 and Indian Point 3 fails to include an adequate aging management plan as required by 10 C.F.R. § 54.21(a)(3) for piping, is overly vague and does not identify the piping PHASE contends is within scope of this proceeding and has been inadequately addressed. The LRA addresses a multitude of piping systems that are within the scope of license renewal and are subject to an aging management review; for each identified piping/material/environment combination, the Applicant identifies which aging management program it will use to adequately manage the effects of aging. See, e.g., LRA at B-27.

Therefore, this contention is inadmissible, as it is outside the scope of this license amendment proceeding, the issue raised is not material to the findings the NRC must make to support a license renewal decision, there is not sufficient information to show that a genuine dispute exists on a material issue of law or fact, and it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309(f)(1)(iii)-(vi).

PHASE Contention 38

Microbial action potentially threatens all the stainless steel components, pipes, filters and valves at Indian Point (issue 99 of EIS).

PHASE Petition at 262. Petitioners contend that the LRA is incomplete because it does not sufficiently provide a comprehensive aging management plan to deal with microbial corrosion of underground pipes. *Id.* at 264. Petitioners claim that although Entergy stated in its LRA that there were no impacts from microbial corrosion that there actually is corrosion, occurring. *Id.* at 262-63.

Staff Response to PHASE Contention 38

The Staff submits that this contention cannot be admitted because the Petitioners fail to meet the contention admissibility requirements of 10 C.F.R. § 2.309. First, the Petitioners' asserted position is overbroad and fails to set forth with particularity the contention sought to be raised. See 10 C.F.R. § 2.309(f)(1). Petitioners' bases fail to demonstrate that a genuine dispute exists with the Applicant regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi). The Petitioners fail to meet the requirement to challenge either specific portions of, or alleged omissions from, the LRA, by not pointing to any components of particular concern; rather, they refer to "all the stainless steel components, pipes, filters and valves at Indian Point." This is overly vague and fails to identify a specific dispute with the Applicant. See *id.*; *Louisiana*

Energy Services, L.P. (National Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004). The Petitioners attempt to narrow this contention by later referring to “400 series stainless steel, inspected and uninspected, components, pipes, filters, and valves at Indian Point,” PHASE Petition at 263, and “important systems and structures at Indian Point 2 & Indian Point 3,” *Id.* at 264. However, at no point do the Petitioners ever mention specific structures, systems, or components within the scope of license renewal. Further, while the Petitioners contend that the LRA claims there are no impacts from microbial corrosion, they fail to cite any specific portion of the LRA that discusses this.

The, Petitioners’ reliance on vague or generalized studies and unsubstantiated assertions without reference to the LRA, fails to demonstrate that there are material issues of fact in dispute. See 10 C.F.R. § 2.309(f)(1)(vi). The Petitioners base this contention on “report[s]” by “underwater divers who replaced the steel roller bearings on the traveling water screens for Indian Point that there were pit marks and holes in the stainless steel visible to the naked eye.” PHASE Petition at 263. However, the Petitioners never state who these divers are; where their reports may be located, or for that matter, whether they were even recorded; what sort of technical expertise the divers had to detect and report on microbial corrosion; or what relevance these supposed pit marks and holes have to the alleged microbial corrosion. Without any of this information, there can be no way to verify dispute the Petitioners’ claim. Further, even with their unsubstantiated claim, Petitioners use language like “may be” and “can be” when referring to the supposed microbial corrosion, and the environmental and safety effects thereof. PHASE Petition at 263, 264. These speculative claims fail to support an admissible contention. Consequently, proposed Contention 38 is inadmissible.

PHASE Contention 39

Indian Point 1 leaks constitute a violation of SafeStor and since components of IP1 are used in the operation of Indian Point 2, the LRA's failure to address these leaks and the interfacing IP 1-IP2 systems renders the LRA inaccurate, incomplete, and invalid.

PHASE Petition at 264. The Petitioners contend that the LRA is incomplete and inaccurate because it fails to address supposed leaks from Unit 1's spent fuel pool and it does not include an aging management plan for components and systems from Unit 1. PHASE Petition at 265, 267. The Petitioners further claim that Entergy is violating its (Unit 1) SAFSTOR commitment with the NRC by attempting to mediate any leaks that might be occurring by pumping the radioactive contamination out of the ground, which is part of the DECON decommissioning option. *Id.* at 265.

Staff Response to PHASE Contention 39

The Staff opposes the admission of this contention as it is outside the scope of license renewal for Units 2 and 3. Petitioners fail to show that the Unit 1 SFP or any related systems and structures within the scope of license renewal, or that it supports or performs an intended function for Units 2 and 3. The Petitioners fail to reference the LRA or show that the list of SSCs provide there is incomplete. Accordingly, they fail to demonstrate that there are material issues of fact in dispute, see 10 C.F.R. § 2.309(f)(1)(vi), and thus the contention is out of scope and should not be admitted.

Further, whether or not Entergy is violating a prior commitment to use the SAFSTOR decommissioning option for Unit 1 is not an issue to be addressed in license renewal. Any violation, if there is one, would be a current operating issue, not subject to license renewal. Therefore, this contention raises an issue that is outside the scope of license renewal for Units 2 and 3, and should not be admitted.

Finally, although the Petitioners state, in passing, that the LRA does not include an aging management plan for components and systems from Unit 1, PHASE Petition at 267, the heart of the contention revolves around spent fuel pool leaks. However, the Petitioners' asserted bases for the contention lack sufficient facts and supporting expert opinion. See 10 C.F.R. § 2.309(f)(1)(v). The Petitioners provide only generalized suspicions that the LRA is inadequate to prevent leaks and fail to meet the requirement to challenge either specific portions of, or alleged omissions from, the LRA, by failing to state which shared components of Units 1 and 2 are within the scope of license renewal and are at issue for this contention. This fails to establish an admissible contention. See 10 C.F.R. §§ 2.309(f)(1)(v)-(vi); *Dominion Nuclear Connecticut* (Millstone Nuclear Power Station Units 2 and 3), CLI-01-24, 54 NRC 349. 363 (2001); *See id.*; *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004). Consequently, proposed Contention 39 is inadmissible.

PHASE Contention 36 [40]⁷⁸

The LRA submitted fails to include Final License Renewal Interim Staff Guidance. For example, LR-ISG 2006-03, "Staff guidance for preparing Severe Accident Mitigation Alternatives."

PHASE Petition at 267.

Staff Response to PHASE Contention 40

⁷⁸ This contention is numbered "36" in the Petition at page 267. It is preceded by another Contention 36 at page 264 and followed by Contention 41 at page 263. Accordingly, the NRC Staff will refer to this contention as Contention 40.

PHASE Contention 40 is identical in all material respects to the first portion of PHASE Contention 14. As explained above, PHASE Contention 14 is inadmissible because it lacks specificity and basis. PHASE Contention 40 is inadmissible for the same reasons.

PHASE Contention 41

Entergy's high level, long-term or permanent, nuclear waste dump on the bank of the Hudson River.

PHASE Petition at 268. PHASE contends that because there is no plan for the offsite disposal of Indian Point's nuclear waste, the LRA must define an aging management plan for such waste and the site must be evaluated and licensed for long term or permanent high level radioactive water storage. *Id.* at 270-71.

Staff Response to PHASE Contention 41

The Staff opposes the admission of this contention. PHASE Contention 41 is based on a mistaken assumption and is unsupported. Moreover, it is also outside of the scope of license renewal.

Contrary to the Petitioners' assertion, there is no requirement that the LRA define an aging management plan for waste. See 10 C.F.R. § 54.4. The LRA does, however, contain an aging management plan to address the structural integrity of the spent fuel pool in which radioactive waste is stored. Specifically, the LRA contains an aging management plan for the spent fuel pool liner plate and gate, storage racks, exterior walls and structural steel (beams, columns and plates). See LRA, Chart 3.5.2-3, pp. 3.5-50-54. Assuming PHASE intended to address the spent fuel pool, the contention fails to identify any deficiency in the LRA's treatment of these matters, and lacks any specific factual basis.

Further in this contention, the Petitioners mistakenly assert that the costs and impacts of waste storage at Indian Point must be evaluated in the "the Applicant's LRA EIS"[sic] and that

the evaluation should address “ongoing, unidentified and unremediated spent fuel leaks and the proposed continued production of high level radioactive waste”. PHASE Petition at 270. As explained above, the issue of environmental impacts of spent fuel pools has been addressed in generic fashion by the Commission by regulation. The Commission has identified spent fuel pools as a Category 1 issue and determined that, for all nuclear plants, the impact of spent fuel pools on the environment is small. Thus, an applicant for license renewal is not required to address the environmental impacts of Category 1 issues. *Turkey Point*, 54 NRC at 21-23. Accordingly, PHASE Contention 41 should be rejected.

PHASE Contention 42

Dry Cask Storage (Issue 83) The Independent Spent Fuel Storage Installation (SFSI) being constructed at Indian Point for the purpose of holding the overflow of nuclear waste on site for decades, and probably more than a century, must be fully delineated and addressed in the aging management plan and, moreover constitutes an independent licensing issue.

PHASE Petition at 280.

Staff Response to PHASE Contention 42

PHASE Contention 42 lacks basis and raises an issue that is outside the scope of license renewal. The Petitioners fail to cite any basis for their assertion that independent fuel storage at Indian Point must be addressed in the aging management plan. They cite no statute or regulation; and, in fact, there is no such requirement. Independent fuel storage facilities are not included in plant systems, structures or components that the regulations list as being within the scope of license renewal. See 10 C.F.R. § 54.4(a).

PHASE Contention 43

The closure of Barnwell will turn Indian Point into a low level radioactive waste storage facility, a reality the GEIS utterly fails to

address, and a fact which warrants independent application with public comment and regulatory review.

PHASE Petition at 286.

Staff Response to PHASE Contention 43

PHASE Contention 43 raises an issue (spent fuel storage) that is beyond the scope of this adjudicatory proceeding. As the Commission explained in denying a similar contention in *Oconee*,

High level waste storage and disposal “is a national problem of essentially the same degree of complexity and uncertainty for every renewal application and it would not be useful to have a repetitive reconsideration of the matter. 61 Fed. Reg. 66,537, 66,538 (Dec. 11, 1996). The Petitioners have presented no reason for the Commission to depart from its generic waste storage determinations in this proceeding and instead litigate the question in an individual case. If petitioners are dissatisfied with our generic approach to the problem, their remedy lies in the rulemaking process, not in this adjudication.

Oconee, CLI-99-11, 49 NRC at 345. The contention is, therefore, inadmissible.

PHASE Contention 44

The Decommissioning Trust Fund is inadequate and Entergy’s plan to mix funding across Unit 2, 1 and 3 violates commitments not acknowledged in the application and 10 CFR rule 54.3.

PHASE Petition at 290. In this contention, Petitioners assert that Entergy’s decommissioning trust fund is inadequate to decommission and then restore the site as required by NRC regulations. *Id.* As the basis for this contention, Petitioners assert that Entergy has failed to adjust its decommissioning trust fund to compensate for underground radioactive contamination discovered in 2005. *Id.* The Petitioners further claim that Indian Point’s “LRA fails to outline an adequate decommissioning and clean up plan for the large amounts of underground radioactive effluent must be included, and the projected increase radioactive contamination, as part of the

aging management and updated decommissioning plan in the LRA.” *Id.* at 293. Also, the Petitioners claim that Entergy’s decommissioning cost estimates have failed to keep up with inflation. *Id.* at 296.

Staff Response to PHASE Contention 44

The Staff opposes the admission of this contention, as it is not within the scope of license renewal. The Petitioners claim that the Commission itself has found that decommissioning is within the scope of license renewal. PHASE Petition at 293. Petitioners state that in *Power Authority of the State of New York and Entergy Nuclear Fitzpatrick LLC, Entergy Nuclear Indian Point 3 LLC, and Entergy Nuclear Operations, Inc.* (James A. FitzPatrick Nuclear Power Plant and Indian Point Nuclear Generating Unit No. 3), CLI-00-22, 52 NRC 266 (2000), the Commission said “that regarding decommissioning Stakeholders have the right to seek intervenor status in any application for license renewal or license extension that Entergy Indian Point may file.” PHASE Petition at 293. This statement, however, is taken out of context and is misquoted. The Commission’s decision concerned a contention filed by the Town of Cortlandt and the Hendrick Hudson School District regarding the transfer of the operating licenses of Indian Point Unit 3 and the James A. FitzPatrick nuclear power plant. The Commission stated, “in posing this issue, Cortlandt overlooks its right to seek intervenor status in any application for license renewal or license extension that Entergy Indian Point may file.” *FitzPatrick*, CLI-00-22, 52 NRC at 304-305 (in which they asserted that the licensees be required to show the ability to decommission as currently licensed, and in the future after license renewal/extension). The Commission did not state that decommissioning could be raised in a license renewal proceeding – but rather, that issues related to license renewal were outside the scope of that proceeding, and Cortlandt could seek to intervene on license renewal in a separate proceeding. The cost of decommissioning is a current operating issue: The GEIS

states, “the impact of license renewal on decommissioning cost is not a consideration in . . . the decision to renew a license.” Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NUREG-1437 Vol. 1), Chapter 7 “Decommissioning,” at 7-1. Further, a licensee who has filed a timely renewal application and has not yet received a final determination on the LRA does not need to file the final decommissioning plan and application for termination until one year after a final determination on the LRA is made. 1991 Statement of Consideration, 56 Fed. Reg. at 64,968-69. Therefore, this contention raises an issue that is out of scope and should not be admitted.

Further, the Petitioners claim that the decommissioning trust fund cost requirements should be increased due to the storage of, and cost of storing, spent nuclear fuel.⁷⁹ PHASE Petition at 297-99. However, the GEIS specifically states that “[d]ecommissioning activities do not include the removal of spent fuel, which is considered to be an operational activity [or] the storage of spent fuel, which is addressed in the Waste Confidence Rule (10 CFR Part 51.23).” GEIS, Chapter 7 “Decommissioning,” at 7-1. Also, the Commission is not statutorily required, and has concluded it is not necessary, to perform economic analyses of extended operation of nuclear power plant licenses, specifically with respect to the increase in decommissioning costs as plants are operated longer and waste is accumulated. 1995 Statement of Consideration, 60 Fed. Reg. at 22,484. Therefore, because no part of the Petitioners’ contention, or any of the bases for the contention, are within scope of license renewal, the contention should not be admitted.

⁷⁹ Also in support of this contention, Petitioners make certain claims regarding spent fuel pool leaks that do not appear to contain any nexus to the decommissioning issue at hand. Other contentions regarding spent fuel pool leaks are discussed elsewhere in this response.

PHASE Contention 45

Non-Compliance with NYS DEC Law – Closed Cycle Cooling
“Best Technology Available” Surface Water Quality, Hydrology
and Use (for all plants)

PHASE Petition at 303. The PHASE Petitioners contend that Indian Point causes thermal pollution of the Hudson River because it does not use closed-cycle cooling, and that Indian Point fails to comply with the State Pollutant Discharge Elimination System (“SPDES”) permit issued by the New York State Department of Environmental Conservation. *Id.* Finally, the Petitioners state that “until the Applicant installs closed-cycle cooling systems for Indian Point 2 and 3 and comes into compliance with the EPA – Clean Water Act and the New York State DEC requirement, a new license for 20 years cannot be approved.” *Id.*

Staff Response to PHASE Contention 45

The Staff opposes the admission of this contention because it raises issues that are, under Federal law, outside the authority of the NRC, and fail to raise an issue within the scope of this proceeding.

It is well settled that “the responsibility with respect to particular water quality matters covered by the [Clean Water Act] no longer resides with the Commission but, rather, has been allocated to EPA and the states.” *Consumers Power Co. (Palisades Nuclear Plant)*, LBP-79-20, 10 NRC 108, 124 (1979) (*citing Tennessee Valley Authority (Yellow Creek Nuclear Plant, Units 1 and 2)*, ALAB-515, 8 NRC 702, 712 (1978)). *See also* Clean Water Act, § 511(c)(2), 33 U.S.C. § 1371(c)(2); *Entergy Nuclear Vermont Yankee, LLC & Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station)*, CLI-07-16, 65 NRC 371, 388 (2007). In *Vermont Yankee*, the Commission noted that “[i]n future cases where EPA [or, as here, a state permitting agency] has made the necessary factual findings for approval of a specific once-

through cooling system for a facility after full administrative proceedings,” Licensing Boards must defer to the agency with permitting authority under the Clean Water Act. *Id.* at 389 (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26 (1978)).

The New York State Department of Environmental Conservation (“NYSDEC”) is the permitting authority under the Clean Water Act for facilities operating in New York State. See 6 N.Y.C.R.R. § 750.1-1. Therefore, responsibility for creating and enforcing water quality standards that comply with the Clean Water Act lie with the NYSDEC, as does the authority for determining the appropriate cooling system to be used at a nuclear power facility, See *Vermont Yankee*, CLI-07-16, 65 NRC at 289, citing *Carolina Power and Light Co.* (H.B. Robinson, Unit 2), ALAB-569, 10 NRC 557, 561 n.4 (1979).

The NRC has no authority to create or enforce water quality standards, or to require construction of closed-cycle cooling at Indian Point to address water quality concerns. For these reasons, this contention must be rejected.

PHASE Contention 47

The Environmental Report fails to consider the higher than average cancer rates and other health impacts in four counties surrounding Indian Point.

PHASE Petition at 305. In support of the contention, PHASE attached a Declaration and report by Joseph Mangano.

Staff Response to PHASE Contention 47

PHASE Contention 47 is inadmissible, because it constitutes an impermissible challenge to Commission regulations governing license renewal, for which radiation exposure is treated as a Category 1 issue in the GEIS. Further, the contention lacks adequate basis, as set forth in the

Staff's response to similar contentions filed by Clearwater and CRORIP,⁸⁰ which were also supported by Declarations and reports by Mr. Mangano similar to the Mangano Declaration and report submitted in support of this contention. For the reasons stated in the Staff's response to Clearwater Contention EC-2 and the CRORIP Contention, which responses are incorporated by reference herein, PHASE Contention 47 is inadmissible.

PHASE Contention 48

Environmental Justice – Corporate Welfare

PHASE Petition at 323. Here, the PHASE Petitioners contend that the nuclear industry receives large subsidies from the federal government, and that these subsidies violate “fair trade standards.” *Id.* at 323-24. The Petitioners also argue that their members and other ratepayers “are at a distinct disadvantage in advocating for public health and safety” because Entergy is able to use “government subsidies and taxpayer dollars to finance a powerful legal staff and a major public propaganda campaign.” *Id.* at 325-26. Finally, the PHASE Petitioners claim that the NRC should require Entergy to pay the legal expenses of the Petitioners. *Id.* at 326.

Staff Response to PHASE Contention 48

The Staff opposes the admission of this contention on the grounds that it fails to provide sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact, and fails to raise an issue within the scope of this proceeding. See 10 C.F.R. §§ 2.309(f)(1)(iii), (iv) and (vi). The contention does not mention the standards for

⁸⁰ Clearwater Contention EC-2 and CRORIP Contention.

environmental justice set forth in the NRC's guidelines for evaluating environmental justice, and it does not allege any way in which the Applicant's analysis fails to meet them. See "Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions," 69 Fed. Reg. 52,040 (Aug. 24, 2004). Further, PHASE Contention 48 does not provide sufficient information to show that a genuine dispute exists with respect to environmental justice issues. Rather, it is little more than a diatribe against Congressional appropriations, over which the NRC has no authority, and it seeks to impose an obligation on Entergy to pay the Petitioners' legal fees, without any showing that such relief could be granted in this proceeding. Therefore, this contention should be rejected.

PHASE Contention 49

Applicant's LRA fails to consider the effects of global warming and Applicant has failed to present a plan for how it will either analyze or manage such effects during an additional 20 years of operation.

PHASE Petition at 329. The PHASE Petitioners argue that the Applicant must set forth a generic aging management plan for continued operation of Indian Point that incorporates the "realities of climate change." *Id.* They elaborate with a discussion of the potential hazards associated with climate change. *Id.* at 329-38.

Staff Response to PHASE Contention 49

The Staff opposes the admission of this contention because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of fact or law within the scope of this proceeding. 10 C.F.R. §§ 2.309(f)(1)(iii) and (vi).

This contention fails to challenge a specific flaw or deficiency in the license renewal application with respect to aging management. Instead, the contention speaks in general terms

about the potential impacts on Indian Point that could be caused by various natural disasters. The contention does not demonstrate the existence of a genuine issue of fact or law concerning the LRA, and it should therefore be rejected.

PHASE Contention 50⁸¹

Replacement Options: Stakeholders contend that the energy produced by Indian Point can be replaced without disruptions as the plants reach the expiration dates of their original licenses

PHASE Petition at 338. The PHASE Petitioners argue that Entergy's ER is deficient "because the alternatives analysis is seriously flawed." *Id.* They then name and discuss several methods of energy conservation and a number of sources of renewable energy. *Id.* at 340-49. They conclude by arguing that New York's energy market should be restructured. *Id.* at 349-51.

Staff Response to PHASE Contention 50

The Staff opposes the admission of this contention because it fails to provide sufficient information to show that a genuine dispute exists on a material issue of fact or law within the scope of this license renewal proceeding. 10 C.F.R. §§ 2.309(f)(1)(iii) and (vi). Other than the conclusory assertion that Entergy's alternatives analysis is "seriously flawed," PHASE Petition at 338, the contention fails to identify a single flaw in Entergy's analysis, much less allege facts or provide expert opinion to support such a claim. In sum, the contention fails to provide sufficient information to show that a genuine dispute exists with the Applicant. For this reason, the contention should be rejected.

⁸¹ This is the first of two contentions numbered 50 by the PHASE Petitioners. The Staff has retained the original numbering for this contention, which begins at page 338 of the PHASE Petition.

PHASE Contention 50.1⁸²

Failure to Address Environmental Impacts of Intentional Attacks &
Airborne Threats

PHASE Petition at 354. The PHASE Petitioners argue that the ER must include “a full discussion of the potential consequences” of a terrorist attack at Indian Point. *Id.* at 368. The Petitioners rely on the *San Luis Obispo Mothers for Peace* decision by the Ninth Circuit, and claim that this decision is “binding guidance.” *Id.* at 356-57.

Staff Response to PHASE Contention 50.1

The Staff opposes the admission of this contention on the grounds that it is beyond the scope of this license renewal proceeding. See 10 C.F.R. § 2.309(f)(1)(iii). The Commission has consistently held that contentions challenging an applicant’s consideration to exclude terrorist attacks in its environmental report are beyond the scope of license renewal, and that such consideration is not required under NEPA. See, e.g., *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 128-29 (2007), *aff’g* LBP-06-7, 63 NRC 188 (2006). See also *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Unit 1), LBP-07-11, 66 NRC 41, 86 (2007) (rejecting a contention challenging the fact that the applicant did not consider aircraft attacks in its Environmental Report). In *Oyster Creek*, the Commission noted that terrorism contentions are beyond the scope of license renewal because they are, “by their very nature, directly related to security” and are not related to “the detrimental effects of aging.” *Oyster Creek*, CLI-07-8, 65 NRC at 129, *citing Duke Energy Corp.* (McGuire Nuclear

⁸² This is the second of two contentions numbered 50 by the PHASE Petitioners. The Staff has renumbered this contention as Contention 50.1 in order to avoid confusion. This contention begins at page 354 of the PHASE Petition.

Energy Station Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 364 (2002).

Further, the Commission has stated that NEPA does not require the NRC to consider the environmental impact of “intentional malevolent acts,” because such impact is too remote for the proposed governmental action to be the proximate cause of that impact. *Id.*, citing *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002).⁸³ Moreover, the Commission noted that there is no basis for admitting a NEPA-terrorism contention in a license renewal proceeding because the GEIS has already performed a discretionary analysis of terrorist acts in connection with license renewal, and concluded that the core damage and radiological release from such acts would be no worse than the damage and release to be expected from internally initiated events. *Id.* at 131.

The Commission’s decision in Oyster Creek establishes binding precedent for the rejection of this contention. Accordingly, this contention must be rejected.

PHASE Contention 51

Withholding of Access [to] Proprietary Documents Impedes Stakeholders Adequate Review of Entergy Application for License Renewal of IP2 LLC and IP3 LLC.

PHASE Petition at 369. In this contention, PHASE asserts that it has been unable to obtain copies of certain documents (including an unredacted version of the FSAR, leak plume maps,

⁸³ The Commission noted that in *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), *cert. denied sub nom. Pacific Gas & Elec. Co. v. San Luis Obispo Mothers for Peace*, 127 S. Ct. 1124 (2007), the Ninth Circuit held that the NRC could not, under NEPA, categorically refuse to consider the consequences of a terrorist attack against a spent fuel storage facility. The Commission respectfully disagreed with the Ninth Circuit's view, and stated that it will continue to observe current NRC practice outside the Ninth Circuit. *Oyster Creek*, CLI-07-8, 65 NRC at 128.

leak reports, and an industry report on Boraflex degradation), due to claims by the Applicant (or, in the case of the Boraflex report, by the Electric Power Research Institute ("EPRI")) that the documents contain proprietary information. *Id.* at 369, 372-74, 382. PHASE asserts that the NRC's treatment of such information as proprietary has impeded its ability to participate in this proceeding, and interferes with its constitutional "rights to redress." *Id.* at 370-71; *accord, id.* at 373, 375, 376, 381-82. Further, PHASE asserts that the time for filing petitions to intervene and contentions in this proceeding should be suspended until "stakeholders have access to a full and complete set of un-redacted versions of the LRA, and its underlying documents, including but not limited to the FSAR's (all versions), USFAR's (all versions), [and] the most current and up to date company and/or NRC version of the Current Licensing Basis (CLB)." *Id.* at 371; *accord, id.* at 382.

Staff Response to PHASE Contention 51

The Staff opposes the admission of this contention for failing to state a genuine dispute of material fact, as required by 10 C.F.R. §2.309(f)(1)(vi). In essence, this contention asserts that PHASE can not file contentions on documents which have been withheld from public disclosure, until the documents are made available to it. The Commission has established an appropriate procedure for dealing with this type of claim, by affording petitioners an opportunity to submit late-filed contentions when new information becomes available. See 10 C.F.R. § 2.309(f)(2). Further, the Commission has established an appropriate mechanism which allows the continued protection of proprietary information submitted under 10 C.F.R. § 2.390, while enabling intervenors to view the protected information under a protective agreement or protective order entered in the proceeding. See 10 C.F.R. § 2.390(b)(6). PHASE has not alleged or shown that these provisions are inadequate to protect its interests in this proceeding.⁸⁴

PHASE'S INCORPORATION OF ALL NYAG CONTENTIONS

In its "Conclusion and Request for Relief," the PHASE petitioners state that they "support, reference and incorporate fully, as set forth herein" the "Notice of Intention to

⁸⁴ Further, PHASE has not shown any reason to believe that litigation in this license renewal proceeding requires examination of "the FSAR's (all versions), USFAR's (all versions)," or "the most current and up to date company and/or NRC version of the Current Licensing Basis (CLB)." To the extent that PHASE seeks such documents, it should be required to demonstrate why those documents are needed to frame issues admissible for litigation in this proceeding. See 10 C.F.R. §§ 2.336 (prohibiting discovery except as provided for mandatory disclosures) and 2.390 (affording protection of proprietary information, subject to disclosure under a protective order or protective agreement).

Participate and Petition to Intervene and Supporting Declarations and Exhibits” filed by the New York Attorney General on November 30, 2007. PHASE Petition at 382-83. Presumably, in seeking to incorporate the State’s filing, the PHASE petitioners seek to adopt each of the 32 contentions filed by the State.

The Staff opposes this attempt by the PHASE petitioners to adopt the petition to intervene and contentions filed by the State of New York. First, with respect to the State’s petition, the PHASE petitioners have not shown that they are authorized to represent the State or any of its citizens, other than the members of their own organizations. Second, with respect to the State’s contentions, the PHASE petitioners have failed to show that they discussed their request with the State, or that any agreement has been reached as to which petitioner would have lead responsibility for litigation of the State’s contentions. For these reasons, PHASE’s request to incorporate the State’s petition and contentions should be rejected, for failing to comply with 10 C.F.R. §§ 2.309(a) and 2.309(f)(3).

2. Contentions Filed By FUSE

FUSE Contention 1

Entergy with the help and assistance of the NRC, in violation of their own Rules and Regulations, is wrongfully abridging the public[’]s right to adequate availability of information necessary to fully and adequately participate in the License Renewal Process, therein negligently, egregiously and wantonly abridging our First Amendment rights to redress.

FUSE Petition, at 56. In support of this contention, FUSE presents a jumbled argument, in which it essentially argues that the Applicant’s request for treatment of certain documents as proprietary information is unfair, and that Entergy and/or the NRC should provide full documentation of the CLB for Units 2 and 3.

With respect to its claims concerning proprietary information, FUSE contends that Entergy has removed certain documents from public scrutiny in this license renewal proceeding, and that the public's right to obtain information overrides Entergy's interest in withholding proprietary information from public disclosure. *Id.* at 56-59.⁸⁵ FUSE requests that it be given access to a "full library of documents necessary to review the application, and form our contentions." *Id.* at 61. With respect to its requests for non-proprietary information, FUSE complains that the NRC's imposition of photocopying fees for documents requested under the Freedom of Information Act ("FOIA") results in a "prohibitive copying fee," *id.* at 65; and asserts that the NRC's [FOIA Branch] request for \$22,000 to copy documents sought by Sherwood Martinelli is excessive. *Id.* at 68. Further, FUSE asserts that Entergy and/or the Commission must provide it with all documents establishing the CLB and design basis for the facility, to permit FUSE to formulate its contentions regarding license renewal. *Id.* at 72-73.

Staff Response to FUSE Contention 1

The Staff opposes the admission of this contention. As stated in response to PHASE Contention 51, the Commission has established appropriate procedures for dealing with requests for proprietary information in an adjudicatory proceeding, if necessary, by execution of a protective agreement or issuance of a Protective Order. A petitioner's assertion that it requires certain documents that have been withheld as proprietary fails to constitute an admissible contention. See Staff Response to PHASE Contention 51, incorporated by

⁸⁵ FUSE seeks copies of "a [sic] un-redacted version of Chapter Fourteen 'Safety Analysis' of the LRA, all versions of the DSAR, FSAR, UFSAR, the DB, DBT, maps, drawings, photographs and inspection reports (including notes and emails) and the CLB." FUSE Petition at 72. In making this demand, it appears to blend together all documents in which it is interested, including proprietary documents, safeguards information (the DBT), and all documents establishing the design basis and CLB for Units 2 and 3.

reference herein. Further, FUSE provides no authority for its assertion that it requires a compilation of the design basis and/or CLB in order to evaluate the LRA, or that Entergy and/or the NRC are obliged to assemble for FUSE all documents comprising the design basis and CLB -- nor is the Staff aware of any legal requirement which would support those assertions. Indeed, the Commission has explicitly instructed that the CLB need not be assembled for consideration in a license renewal proceeding. 1995 Statement of Consideration, 60 Fed. Reg. at 22,473-74. Moreover, the Commission has provided various methods by which a petitioner may obtain documents in which it is interested, including the submission of document requests under FOIA (with full authority to impose photocopying fees, as appropriate),⁸⁶ and access to documents on the NRC's public web site, in the Public Document Room, and in ADAMS. FUSE has failed to provide an adequate legal basis for this contention as required by 10 C.F.R. § 2.309(f)(1)(v), and it fails to satisfy the materiality and genuine dispute standards in § 2.309(f)(1)(iv) and (vi).

FUSE Contention 2

NRC Rules and Regulations as relate to the hearing process defacto mitigate and abridge a citizen's right to redress under the law, as is protected under our rights as outlined in the First Amendment. Further, Entergy as a licensee [is] given far too much sway in dictating to the NRC what is [an] appropriate time schedule for the process.

FUSE Petition, at 80. In support of this contention, FUSE presents a tangle of assertions regarding the fairness of the adjudicatory process established in 10 C.F.R. Part 2; the commencement of this adjudicatory proceeding when the LRA was not fully complete; the considerable time constraints faced by FUSE in having to review the LRA before submitting

⁸⁶ See 10 C.F.R. §§ 2.390(a), 9.23, and 9.33 - 9.45.

contentions; the difficulty in confronting a well-funded applicant with a large budget for legal fees; FUSE's difficulty in obtaining documents under FOIA, without having to pay the fees assessed by the NRC; and the constraints imposed by the adoption of an expedited hearing schedule. *Id.* at 81-94. Further, FUSE requests a "change of venue" so "that this case be heard by the IAEA or the World Court," *id.* at 95, and it requests that the Licensing Board "consider ordering Entergy to pay . . . [FUSE's] legal and professional fees." *Id.* at 96.

Staff Response to FUSE Contention 2

The Staff opposes the admission of this contention. Rather than state a matter that is material to the findings which must be made in this proceeding, this contention merely presents a generalized statement of FUSE's views regarding the Commission's hearing process and the burdens faced by petitioners in challenging a license renewal application, and it constitutes an impermissible challenge to the Commission's Rules of Practice in 10 C.F.R. Part 2. FUSE's requests for an Order compelling Entergy to pay FUSE's expenses is unsupported by any showing that the Licensing Board could properly grant that relief; further, its request for a change of venue impermissibly challenges the Commission's authority to consider license renewal applications and to conduct adjudicatory proceedings on such applications, as provided in the Atomic Energy Act of 1954, as amended. The contention should be rejected for failing to satisfy the standards set forth in 10 C.F.R. §§ 2.309(f)(1)(i), (iii), (iv), (v), and (vi).

FUSE Contention 2.1⁸⁷

⁸⁷ FUSE raised two different sets of issues under the contention designated as "Contention 2"; one raises procedural matters, while the second raises a safety concern. See FUSE Petition at 80, 100. For clarification purposes, the Staff has here designated the second issue as "Contention 2.1."

A generic safety concern contention for Entergy's entire application, and approach to ascertaining the fitness of Indian Point for a period of 20 more years of operation.

FUSE Petition, at 100. This sentence fragment is presented at the conclusion of FUSE Contention 2. Whereas FUSE Contention 2 primarily presented procedural issues, this sentence fragment appears to relate to a discussion in Contention 2 in which FUSE refers to "Additional Environmental, Safety, Degradation, Corrosion, Fatigue and Other Reactor Failure Mechanism Contentions." *Id.* at 97. In that discussion, FUSE presents a rambling assertion that the performance of "the entire facility" should be evaluated for license renewal, including consideration of various reactor degradation processes; the potential occurrence of "a multiple breakdown or failure of systems, mechanisms and processes" due to terrorist attacks, black-outs, hurricanes or tornados; a chain of events such as occurred at Three Mile Island; and the lack of multiple back-up power generators for each Unit. *See id.* at 98-99.

Staff Response to FUSE Contention 2.1

The Staff opposes the admission of this contention. The contention is disorganized, vague, and overly broad, and it fails to raise a specific issue that is capable of litigation in this proceeding. Further, FUSE made no attempt to comply with the "basis" and other requirements of 10 C.F.R. § 2.309, which it was required to do if it intended to raise its assertions here as a real contention. The contention should be rejected for failing to satisfy the standards set forth in 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iii), (iv), (v), and (vi).

FUSE Contention 3

Fatal flaws, and perhaps egregious misrepresentation of facts as relates to Environmental Qualification of Low-Voltage Instrumentation and Control Cables.

FUSE Petition at 100. In support of FUSE Contention 3, FUSE speculates that, based in part on information in NRC Regulatory Issue Summary (RIS) 2003-09 "Environmental Qualification [EQ] Of Low-Voltage Instrumentation And Control Cables," safety margins may be reduced for some EQ low voltage cables. FUSE Petition at 100-102. FUSE provides a discussion of tests of cables, and NRC positions to assert that there is no certainty that Entergy can maintain EQ for low-voltage cables, and that the entire EQ program is inadequate. *Id.* at 104. FUSE concludes by noting that "the documents referenced for this contention have been accessed through normal public access avenues available to any one, and so have not been labeled as exhibits to this contention." *Id.*

Staff Response to FUSE Contention 3

Contention 3 is vague and unsupported. It fundamentally fails to identify any error or omission in the application, so it fails to satisfy 10 C.F.R. § 2.309(f)(1)(vi). Further, it is based on mere speculation, which is insufficient to satisfy 10 C.F.R. § 2.309(f)(1)(v). Finally, to the extent that it alleges that testing causes the compliance with EQ requirements to be compromised, it raises a compliance issue, which by definition is a current operating issue, not subject to a license renewal review. 10 C.F.R. § 54.30. The contention should be rejected.

FUSE Contention 5

Entergy Aging Management Plans for almost all components and systems at both IP2 and IP3 are inadequate, non-existent, or are wrongfully written up as future commitments that A) are not legally enforceable, and B) have not, cannot and are not being met in a timely fashion.

FUSE Petition at 106. In support of Fuse Contention 5, FUSE states that the LRA fails to mention many necessary and critical aging management problems; that flow accelerated corrosion (FAC) is addressed by short explanations or through unenforceable commitments;

that an applicant's statement that an AMP is identical to NUREG-1801 does not adequately describe, nor constitute, an AMP; and that the regulations require AMPs, not commitments, to be included in the LRA. *Id.* at 106-107. In addition, FUSE asserts that Entergy needs to provide a detailed AMP for: Alloy 600 program, one-time Inspection Program (for Chemistry Program Validation), Diesel Fuel Monitoring and Storage Program/Diesel Generator, Fire Protection Program, Reactor Vessel Internals Inspection Program, Program for the pressurizer support skirts, and others. *Id.* at 107-110. FUSE alleges that Entergy has chosen to be vague and ambiguous or to remain silent on certain aging issues; that parts and systems can be significantly embrittled, and need to be managed for aging; and it suggests that current industry aging management plans are ineffective. *Id.* at 110-12. Finally, FUSE asserts that Indian Point 2 and 3 have one or more current exemptions related to Fire Protection, but failed to provide analyses to show the exemptions should be carried over into the renewed licenses. *Id.* at 108.

Staff Response to FUSE Contention 5

The Staff opposes the admission of FUSE Contention 5, for the reasons stated in response to a similar contention filed by the PHASE Petitioners (PHASE Contention 13). Further, FUSE has not identified a genuine dispute with the application on a specific topic related to aging, but instead is broadly alleging that the application is deficient for using commitments. Contrary to FUSE's unsupported assertions, commitments are allowed by the regulations. In promulgating the license renewal rule, the Commission contemplated that a previous commitment can be relied upon in the renewal application as an effective program to manage age-related degradation during the renewal term. 1991 Statement of Consideration, 56 Fed. Reg. at 64,953. Further, in publishing the revisions to the license renewal rules, the Commission concluded that a licensee renewal review may consider written commitments that concern the capability of systems, structures, and components, identified in § 54.21(a),

integrated plant assessment and § 54.21(c) time-limited aging analyses, to perform their intended functions, as delineated in § 54.4(b). 1995 Statement of Consideration, 60 Fed. Reg. at 22,473. The current regulations in 10 C.F.R. Part 54 similarly recognize the acceptability of commitments. See 10 C.F.R. §§ 54.3, 54.33(d). Likewise, the SRP-LR recognizes that commitments may be used, for example, to create or supplement AMPs. See *e.g.*, NUREG 1800-01 at 3.03-3. Accordingly, the LRA is not deficient for having commitments instead of final programs.

FUSE listed many programs that it alleged that were not sufficiently detailed (*e.g.*, thermal fatigue management program, galvanic Corrosion Susceptibility Inspection Program, Pressurizer Examinations Program, Heat Exchanger Program, Fuse Holders Program.) FUSE Petition at 109. FUSE failed, however to provide any expert support or explanation as to why more details were needed or, for most of its list, even to cite to the portions of the LRA it disputed. Accordingly, FUSE's list of programs for systems does not support the admission of Contention 5 under 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Further, the contention does not state a genuine dispute regarding specific portions of the application. The Licensing Board has stated that any contention that fails directly to controvert the application, or that mistakenly asserts that the application does not address a relevant issue, may be dismissed. "Memorandum and Order (Denying the Village of Buchanan's Hearing Request and Petition to Intervene)", dated December 5, 2007, at 8 (*citing 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); and *Texas Utilities Elec. Co. (Comanche Peak Steam Electric Station, Unit 2)*, LBP-92-37, 36 NRC 370, 384 (1992)).

Moreover, insofar as the contention generally challenges the use of commitments in an LRA, the contention is an impermissible challenge to the license renewal regulations. The

adjudicatory process is not the proper venue for evaluation of FUSE's view that the NRC regulations cannot be met by commitments in the LRA. See *Id.* (citing Peach Bottom, ALAB-216, 8 AEC at 21 n.33⁸⁸).

Finally, regarding the alleged failure to provide an analysis for current exemptions for fire protection that will be carried over, FUSE has failed to explain this assertion or show why this is a requirement associated with the management of aging. FUSE's unsupported opinion fails to establish a requirement material to any aging issue, and does not support admissibility. 10 C.F.R § 2.309(f)(1)(iii).

FUSE Contention 6

At least one of Indian Point[']s spent fuel pools is using Boraflex, and in fact and deed has Age Related Degradation issues which in fact and deed are creating potentially significant risk to human health and the environment.

FUSE Petition at 112. In support of this contention, FUSE observes that Boraflex degrades from exposure to gamma radiation in the aqueous pool environment, and that the rate of degradation depends on a number of factors including gamma dose, pool water temperature, and specific fuel rack design features. *Id.* at 112-13. FUSE asserts that one of the signs that a spent fuel pool has serious degradation issues is pool clarity, and this has been observed at Indian Point; that the IP2 pool has significant Boraflex corrosion issues; and that the LRA does not mention the visibility issue, or provide a comprehensive AMP to deal with this age-related

⁸⁸ "If facts pertaining to the licensing of a particular nuclear power plant are at issue, an adjudicatory proceeding is the right forum. But if someone wants to advance generalizations regarding his particular views of what applicable policies ought to be, a role other than as a party to a trial-type hearing should be chosen." *Philadelphia Electric Co. et al.* (Peach Bottom Atomic Power Station, Units 2 and 3) ALAB-216, 8 AEC 13, 21 n.33 (1974).

degradation issue. *Id.* at 113-114. Finally, FUSE asserts that neither the LRA and nor the ER identify and evaluate the environmental impacts of an accident caused by spent fuel pool visibility, or an accident caused by spent fuel pool visibility combined with human error. *Id.*

Staff Response to FUSE Contention 6

FUSE Contention 6 is inadmissible in that it alleges a deficiency for a beyond-scope issue. To the extent that FUSE is alleging that a spent fuel pool visibility AMP is required, FUSE has failed to provide support for treating visibility as an aging issue, nor has FUSE explained how visibility would be in-scope of license renewal pursuant to 10 C.F.R. § 54.4. Further, FUSE has not explained why a spent fuel pool visibility accident would be in-scope under 10 C.F.R. § 54.4(a)(1)(iii), in that it has not shown or alleged that a visibility-accident must be considered separately from the already-considered design-basis fuel pool accident described, *e.g.*, in IP2 UFSAR, Sections 14.2.1.1, "Fuel Handling Accident in Fuel-Handling Building," and 14.2.1.3, "Fuel Cask Drop Accident." In addition, regarding the ER, FUSE has made no effort to identify where or how the ER is deficient in considering an accident. Finally, to the extent that FUSE is alleging current visibility issues and known safety issues, such issues concern compliance with the CLB, not aging management, and are not subject to a license renewal review in accordance with 10 C.F.R. § 54.30.

FUSE Contention 7

Emerging Issues[.] Typically, following a component failure event at a nuclear power plant, the NRC raises a question as to how the failure relates to an applicant whose license renewal application (LRA) is currently under review. This same question may then be asked of subsequent applicants. There are NUMEROUS emerging issues, that according to the NRC Rules and Regulations we are now entitled to raise in the License Renewal Process. We therefore raise the following issues as contentions in this LRA process.

FUSE Petition, at 114. In support of this contention, FUSE argues that Entergy should be required to provide aging management for transformers, electrical components, electrical cables and connections (which FUSE asserts are dealt with by the Applicant in a “Grand Tour approach”), and “all seismic issues . . . which will be more fully defined at the appropriate time.” *Id.* at 115-16.

Staff Response to FUSE Contention 7

The Staff opposes the admission of this contention. Nowhere in the contention does FUSE provide a reference to any portion of the application that it contends is deficient, as it is required to do under 10 C.F.R. § 2.309(f)(1)(vi). Its reference to transformer problems and seismic issues fail to indicate any manner in which the LRA is deficient; moreover, all of the basis statements provided in support of this contention – which appear in just over one page of discussion, *id.* at 114-16 -- are vague and lacking in specificity, so that it is impossible to ascertain precisely what issues must be litigated under this contention. The contention should be rejected for failing to satisfy the standards set forth in 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iii), (iv), (v), and (vi).

FUSE Contention 8

Entergy has provided no cable management plans, but instead relies upon future commitments, despite the fact that all license renewal applicants are required to have a cable aging management plan.

FUSE Petition at 116. In support of this contention, FUSE states that none of the already-approved superseding licenses for other applicants have cable AMPs. *Id.* A cable aging management program for low and medium voltage cable will be needed. *Id.* (*citing* a License Renewal Commitment Review by EPRI (2005)). FUSE contends there are numerous commitments related to cables and cable aging management listed in the SERs, and that

essentially all plants entering license renewal have committed to a cable aging management program, with later plants providing slightly more detailed commitments. *Id.* According to FUSE, the commitment to have an AMP does not meet 10 C.F.R. Part 54, so the NRC should reject the LRA. *Id.* at 117.

Staff Response to FUSE Contention 8

The Staff opposes the admission of FUSE Contention 8 because it fails to identify a genuine dispute with the application. 10 C.F.R. § 2.309(f)(1)(vi). FUSE targets its contention not on an omission in the application, but instead against the NRC's established practice and rules accepting commitments.

As discussed in the Staff Response to Fuse Contention 5 above, commitments can be relied upon in the renewal application as an effective program to manage age-related degradation during the renewal term, and both the regulations in 10 C.F.R. Part 54 and the Staff's SRP-LR recognize that commitments may be used. FUSE fails to demonstrate the existence of a genuine dispute with respect to this matter, and its contention should be rejected as an impermissible attack on Commission regulations.

FUSE Contention 9

Indian Point wrongfully eliminates from consideration almost all SAMA candidates, primarily based upon a Cost/Benefit Analysis, which uses fuzzy logic, antiquated population figures, and by placing a low dollar value on PUBLIC EXPOSURE to radiological contaminants.

FUSE Petition at 117.

Staff Response to FUSE Contention 9

FUSE Contention 9 is inadmissible because it is unsupported; FUSE proffers no documents, expert statements, or any other evidence in support of its contention, contrary to the requirements of 10 C.F.R. §§ 2.309(f)(1)(ii), (v) and (vi).

FUSE Contention 10

Increased leakage from primary to secondary aging is not addressed, despite two key facts that would increase the risk to public health and safety.

FUSE Petition at 121. FUSE asserts that increased leakage during the period of license renewal greatly increases the probability of a significant tube rupture. In its view, primary to secondary leakage rates will increase the amount of tritium escaping into the environment through unmonitored and uncontrolled leaks. FUSE asserts that Entergy's license renewal application fails to lay out an Aging Management Program for this known safety and aging issue for the period of license renewal. *Id.*

Staff Response to Fuse Contention 10

Fuse Contention 10 is inadmissible because it is unsupported; FUSE proffers no documents, expert opinions, or any other evidence in support of its contention, contrary to the requirements of 10 C.F.R. §§ 2.309(f)(1)(ii), (v) and (vi).

FUSE Contention 11

Both Indian Point 2 LLC and Indian Point 3 have OEM coatings in containments that are not classified as DBA qualified or acceptable. These OEM DBA unqualified coatings in the Indian Point PWR containments will fail during a loss-of coolant accident (LOCA) and thus be available for transport to the emergency core cooling system's (ECCS's) sump, thus negatively impacting the licensee's ability to have and maintain Safe Shutdown.

FUSE Petition at 121. The Petitioner contends that even though Entergy has stated that its containment coatings are DBA ["design basis accident"] qualified or acceptable, that they are in

fact not “DBA qualified or accepted with respect to formulation, manufacture, application, and/or documentation.” *Id.* at 122.

Staff Response to FUSE Contention 11

The Staff opposes the admission of this contention, in that the Petitioner’s asserted bases for proposed Contention 11 lack sufficient facts, contain no supporting expert opinion, and are generally unclear. See 10 § C.F.R. 2.309(f)(1)(v). Here, FUSE impermissibly relies on generalized suspicions and vague references to seemingly unrelated issues to support its contention that the coatings are unacceptable. This is insufficient to establish an admissible contention. See *id.*; *Dominion Nuclear Connecticut* (Millstone Nuclear Power Station Units 2 and 3), CLI-01-24, 54 NRC 349. 363 (2001). Further, FUSE cites no expert opinion in support of its alleged facts. See 10 C.F.R. 2.309(f)(1)(v). Moreover, it remains unclear what exactly FUSE wishes to litigate within this contention. See *Dominion Nuclear Connecticut* (Millstone Nuclear Power Station Units 2 and 3), CLI-01-24, 54 NRC 349. 363 (2001).

Further, FUSE does not challenge anything relating to license renewal, and thus fails to show that a genuine dispute exists with the licensee on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). FUSE fails to meet the requirement to challenge either specific portions of, or alleged omissions from, the LRA, see *id.*; *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004). In addition, it raises current compliance issues rather than a license renewal issue, as to certain matters. For example, sump performance under LOCA conditions is a current operating issue that is addressed by Generic Safety Issue (GSI)-191, “Assessment of Debris Accumulation on PWR Sump Pump Performance.” Further, the potential failure of coatings due to mechanisms (e.g., LOCA) other than aging degradation are not required to be considered for license renewal. In addition, the loss of coating or other material as a result of a design basis accident (DBA), is not within the

scope of the license renewal rule. FUSE focuses its argument entirely around containment failure due to accidents, rather than the effects of aging. Adjudicatory hearings for license renewal are limited to a “review of the plant structures and components that will require an aging management review for the period of extended operation and the plant’s systems, structures, and components that are subject to an evaluation of time-limited aging analyses,” *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 212 (2001) (citing 10 C.F.R. §§ 54.21(a) and (c), 54.4; and the 1995 Statement of Consideration, 60 Fed. Reg. at 22,461). Therefore, this is not the proper venue for Petitioner’s contention.

The Staff notes that one aspect of coatings is referenced or discussed in NUREG-1801, Rev. 1. It states: “If protective coatings are relied upon to manage the effects of aging, the structures monitoring program is to include provisions to address protective coating monitoring and maintenance.” Entergy’s LRA Section B.1.8, Containment Inservice Inspection, addresses this issue. It states:

Painted or coated areas are examined for evidence of flaking, blistering, peeling, and discoloration. Non-coated areas are examined for evidence of cracking, discoloration, wear, pitting, corrosion, gouges, and surface irregularities. Components in examination category E-C receive an augmented visual or volumetric examination in accordance with IWE Table 2500-1.

Thus, in accordance with regulatory guidance (SRP-LR and GALL), the Applicant has included coatings in its aging management program. FUSE does not assert that the LRA’s treatment of this matter is deficient. Consequently, Proposed Contention 10 is inadmissible.

FUSE Contention 12

In Entergy’s Environmental Report, Appendix E to the LRA, Entergy’s admits that the majority of their plant employees for both IP2 and IP3 reside in Dutchess County, New York. A close study

of their employee population distribution tables, shows that a very small handful of Entergy's employees actually live relatively close to the Nuclear Facility, with only 22 living in Buchanan. In the event of a SIGNIFICANT radiological event at the plant such as a SCRAM, LOCA, or DBT or a DBA, especially during a holiday makes it impossible for Entergy to return employees to the facility in a timely fashion, thus greatly impacting their ability to do and maintain a safe shutdown of the plant.

FUSE Petition at 123. FUSE creates an environmental contention based on emergency planning, arguing that "[t]he place of residence of many Entergy employees that must be on hand in a significant event, could seriously impinge on the plants ability to do and maintain a safe shutdown of the reactors." *Id.* at 124.

Staff Response to FUSE Contention 12

The Staff opposes the admission of this contention on the grounds that emergency planning issues are outside the scope of license renewal. See the Staff's response to PHASE Contention 18, which is incorporated by reference herein.

FUSE Contention 13

In certain accident scenarios such as an outside Design Basis Accident, or a LOCA (Loss of Coolant Accident), or in the case of widespread blackout off site, Entergy wrongfully places far too much emphasis on outside assistance in dealing with their onsite accident scenario. This reliance on offsite assistance from local police, fire fighting and other first responders in turn GREATLY IMPACTS public health and safety for the citizens living within the EPZ, due to what could become a critical shortage of both manpower and critical equipment that our communities rely upon in maintaining our health and safety.

FUSE Petition at 124. FUSE contends that in the event of an accident, Entergy's emergency plans would waste the "valuable limited emergency resources of local communities." *Id.* at 125. The Petitioner also argues that Entergy should not have to rely on public resources in "maintaining safe shut down" of Indian Point. *Id.* at 126.

Staff Response to FUSE Contention 13

The Staff opposes the admission of this contention on the grounds that issues related to emergency planning are beyond the scope of license renewal proceedings. This matter is more fully discussed in the Staff's response to PHASE Contention 18, which is incorporated by reference herein.

FUSE Contention 14

The LRA, and the UFSAR's for IP2 and IP3 fail to adequately address the currently existing, known and unknown, environmental impacts and affects [sic] from the ongoing known and unknown leaks of underground pipes, and fails to lay out a workable aging management plan for said leaks.

FUSE Petition at 128.

Staff Response to FUSE Contention 14

The Staff opposes the admission of this contention. While FUSE contends that the application fails to adequately address the environmental impacts of leaks, it does not support its contention with data and has not identified an expert that it intends to call in connection with this contention. The contention is thus unsupported, contrary to the requirements of 10 C.F.R. §§ 2.309(f)(1)(ii), (v) and (vi).

The contention also fails because it does not raise a dispute with the Applicant regarding a material issue. FUSE has not advanced any evidence to challenge Entergy's claim that the environmental impact of leaks is low. FUSE claims that the concentrations of radionuclide contamination in the groundwater at Indian Point is high, but it does so by taking the Entergy's data regarding contamination levels out of their necessary and proper context. Entergy's samples from monitoring wells showed levels of radionuclide contaminants in excess of the EPA's drinking levels, but none of the monitoring wells consist of drinking wells, nor is drinking

water affected by the contamination.⁸⁹ The NRC's inspection of groundwater contamination at Indian Point, initiated in response to the August 2005 discovery of contaminated water, found no occupational or public health and safety effects and "no detectable plant-related radioactivity in groundwater beyond the site boundary."⁹⁰ The NRC report further stated "the current radioactive releases and associated public doses are below the NRC radioactivity release and public dose limits."⁹¹ Because FUSE has not supported this contention and has not demonstrated the existence of a genuine issue of fact, the contention is inadmissible.

FUSE Contention 15

Numerous ENVIRONMENTAL and ECONOMIC JUSTICE Issues related to License Renewal need to be addressed in the hearing that directly and or indirectly affect public well being, health and safety.

FUSE Petition, at 141. In support of this contention, FUSE argues that current Federal statutes afford the nuclear industry "financial incentives beyond what is available to renewable energy sources," *id.*; that New York taxpayers must "foot the bills" for Indian Point-related expenses, *id.* at 142; that Entergy receives large government grants and subsidies, and enjoys a large profit, *id.* at 142-43; that subsidies of the nuclear industry result in depriving "lower income citizens" of "fair and equal" access to "healthier" wind and solar energy – which FUSE claims is an "environmental justice" issue, *id.* at 143-44; that the NRC should require Entergy to pay "the

⁸⁹ See Indian Point Nuclear Generating Unit 2 – Special Inspection Report No. 05000247/2005011 (March 16, 2006), ADAMS Accession No. ML060750842, cited in Riverkeeper Petition at 81, n. 114.

⁹⁰ *Id.* at viii.

⁹¹ *Id.* at vii.

legal expenses of the community stakeholders,” and should require a comprehensive study of the actual costs to taxpayers for the operation of Indian Point,” *id.* at 144-46; that the large number of “non-English speaking residents” living near Indian Point is affected by the plant because “the Emergency Evacuation Booklet is in English,” *id.* at 416; that unidentified “sustenance fishermen” who fish in the Hudson River catch “fish laced with strontium” that is leaking from Indian Point, *id.* at 147; that “the Category 1 analysis in the GEIS [for unspecified matters] is insufficient due to Indian Point site-specific leaks, *id.* at 148; that Indian Point’s failure to construct a “fish pipeline” has resulted in decreased fish populations, which adversely affects sustenance fishermen, *id.*; that the NRC should require construction of a fish return pipeline and closed cycle cooling prior to approving the LRA, *id.* at 149; that roller bearings on the traveling water screens of Indian Point Unit 3 have large holes due to microbe-induced corrosion which could result in environmental contamination, and that this issue requires site-specific treatment as it is not addressed in the GEIS, *id.*; at 149-51.

Staff Response to FUSE Contention 15

The Staff opposes the admission of this contention. First, the contention is overly broad and fails to state a specific issue that is capable of litigation in this proceeding. Second, insofar as the contention argues that some matter was improperly treated as a Category 1 issue in the GEIS, the contention is overly vague as FUSE fails to explain which issue it is addressing. Third, FUSE provides no basis in support of its assertion that “sustenance fishermen” constitute a cognizable environmental justice population, that fish populations have been adversely affected by failure to build a fish pipeline, and Indian Point Unit 2 or Unit 3 (rather than Unit 1 or some other source) is leaking strontium into the river. Fourth, FUSE’s complaint about Federal subsidies of nuclear power, Entergy’s profits, and local residents’ payment of Indian Point-related expenses, fail to present an issue that is material to a decision as to whether the LRA

meets NRC requirements and should be granted. Fifth, to the extent that the contention raises microbe-induced corrosion issues, the contention restates matters that were raised in PHASE Contention 38; the Staff opposes the admission of this aspect of the contention for the reasons stated in response to PHASE Contention 38. Sixth, the contention does not mention the standards for environmental justice set forth in the NRC's guidelines for evaluating environmental justice, and it does not allege any way in which the Applicant's analysis fails to meet them. See Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions, 69 Fed. Reg. 52,040 (Aug. 24, 2004). In sum, this contention should be rejected for failing to satisfy the standards set forth in 10 C.F.R. §§ 2.309(f)(1)(i), (iii), (iv), (v), and (vi).

FUSE Contention 16-19

Contentions 16 through 19-Applicants violation of the Administrative Procedures Act in bypassing the Code of Federal Regulations (CFR) in lieu of trade guidance for defining Indian Point 2's General Design Criteria relevant to current design and more on point relevant to superseding the current operating license with a new operating license to facilitate an extended period of operation:

FUSE Petition, at 152. In support of this contention, FUSE presents numerous arguments concerning the adequacy of the design criteria to which Indian Point Units 2 and 3 were designed. See *id.* at 152-64. FUSE alleges, *inter alia*, that the applicable design criteria are misstated in the FSAR, *id.* at 154; that Units 1 and 2 should have been required to meet the Draft GDC published by the AEC in July 1967, rather than the AIF proposed modifications of the Draft GDC, *id.* at 154-56; that the NRC's issuance of Bulletins, Orders, Generic Letters, and Regulatory Guides following the adoption of the Final GDC in 1971 (a) violated the Administrative Procedures Act, *id.* at 157, and (b) establish that compliance with the Final GDC

was required, *id.* at 156-57; that the FSAR fails to address and/or satisfy various requirements of the Final GDC, including GDC 10, 13, 19, 35, 45, and 64, *id.* at 159-63; and that the Applicant has failed to examine or replace reactor vessel internal components known to be susceptible to failure, *id.* at 163-64; that the FSAR misstates the applicable design criteria, *id.* at 162; that a commitment made by the Applicant to address reactor vessel internal components deprives the public of an opportunity to participate on the matter, *id.* at 164; and that the Applicant's AMP and environmental program fail to consider a leaking "conduit" – which FUSE describes as a 20-inch pipe, *id.* at 165. In sum, FUSE alleges that the design basis and CLB for Indian Point Unit 2 is unknown, and that the LRA should therefore be denied, *id.* at 166.

Staff Response to FUSE Contention 16-19

The Staff opposes the admission of this contention. In essence, this contention reiterates, with little modification, the issues that were raised in PHASE Contention "22-25." To avoid unnecessary repetition, the Staff incorporates herein its response to PHASE Contention 22-25. For the reasons stated therein, FUSE Contention 16-19 should be rejected for failing to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iii), (iv), (v), and (vi).

FUSE Contention 20

The License Renewal Application (LRA) fails to provide sufficient detailed information regarding technical, safety and environmental pendant issues.

FUSE Petition, at 166. In the brief basis statement provided in support of this contention (*id.* at 167-68), FUSE asserts that the LRA fails to include sufficient information to show how it will comply with the requirements in 10 C.F.R. § 54.21. In this regard, FUSE asserts that the LRA contains insufficient information with respect to the "Equipment Environmental Qualification Program" and the "Flow-accelerated Corrosion Program." *Id.* at 167.

Staff Response to FUSE Contention 20

While FUSE asserts that the EQ and FAC programs are not described in sufficient detail, it fails to provide a specific reference to any portion of the Applicant's aging management programs, which it contends is inadequate. The only basis statement it makes in this regard is that "the Applicant provided a one paragraph description of its planned program, which essentially credited the current Flow—accelerated corrosion (FAC) program with no further explanation." FUSE fails to identify the paragraph it contends is inadequate, and it fails to describe any specific deficiency in the LRA; further, its assertion is unsupported by any expert opinion or factual showing, and it fails to establish the existence of a genuine dispute of material fact regarding the adequacy of the Applicant's aging management program. In addition, although the contention claims the Applicant's ER is deficient, FUSE fails to explain this claim or to show any deficiency in the ER. In sum, the contention should be rejected for failing to satisfy the standards set forth in 10 C.F.R. §§ 2.309(f)(1)(ii), (v), and (vi).

FUSE Contention 21

Co-mingling three dockets, and three DPR licenses under a single application is in violation of C.F.R. Rules, Specifically 10 CFR 54.17 (d) as well as Federal Rules for Civil Procedure rule 11(b).

FUSE Petition, at 168. In support of this contention, FUSE argues that Indian Point Units 2 and 3 have separate licenses, separate dockets, separate owners (now and in the past), different operating histories, separate architect/engineers, and separate NRC Staff reviews. FUSE Petition at 168-69. In FUSE's view, combining the license renewal applications in a single proceeding violates 10 C.F.R. § 54.17(d) and Rule 11(b) of the Federal Rules of Civil Procedure ("FRCP"). *Id.* at 168.

Staff Response to FUSE Contention 21

The Staff opposes the admission of this contention. This contention restates, with little modification, the issues that were raised in PHASE Contention 1. Accordingly, to avoid unnecessary repetition, the Staff incorporates herein its response to PHASE Contention 1. For the reasons stated therein, FUSE Contention 21 should be rejected for failing to meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii), (iii), (iv), (v), and (vi).

FUSE Contention 22

The NRC violated its own regulations by accepting a single License Renewal Application made by the following parties: Entergy Nuclear Indian Point 2, LLC (“IP2 LLC”) Entergy Nuclear Indian Point 3, LLC (“IP3 LLC”), and Entergy Nuclear Operations, LLC. (ENO).

FUSE Petition, at 170. This contention challenges the Staff’s acceptance for docketing of a single license application for Units 2 and 3 – an issue that was also raised in PHASE Contention 3. Like PHASE, FUSE’s basis for this contention asserts that Entergy’s application for indirect license transfer, submitted on July 30, 2007, should not be granted. According to FUSE, the corporate structure described in the LRA is inaccurate, based on the corporate structure depicted in the indirect license transfer application, *id.* at 171. Further, FUSE asserts that the license transfer application proposes a new ownership structure for Indian Point Units 2 and 3, adversely affecting the financial qualifications for Indian Point Units 2 and 3 and the public’s health and safety. *Id.* at 170-75.

Staff Response to FUSE Contention 22

The Staff opposes the admission of this contention. This contention restates, with little modification, the issues that were raised in PHASE Contention 3. Accordingly, to avoid unnecessary repetition, the Staff incorporates herein its response to PHASE Contention 3. Further, as stated above in response to PHASE Contention 2, the indirect license transfer

application is outside the scope of this proceeding.⁹² Accordingly, FUSE Contention 22 should be rejected for failing to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iii), (iv), (v), and (vi).

FUSE Contention 23

The Decommissioning fund inadequacy and the plan for Entergy to mix funding across Unit 2, 1 and 3 violates commitments not acknowledged in the application and 10 CFR rule 54.3.

FUSE Petition at 176. In this contention, Petitioner asserts that Entergy's decommissioning trust fund is inadequate to decommission and then restore the site as required by NRC regulations. *Id.* As the basis for this contention, FUSE asserts that Entergy has failed to adjust its decommissioning trust fund to compensate for supposed newly discovered underground radioactive contamination. *Id.* FUSE further claims that Indian Point's "LRA fails to outline an adequate decommissioning and clean up plan in light of the large amounts of underground radioactive waste." *Id.* at 179. Also, FUSE claims that Entergy's decommissioning costs have failed to keep up with inflation. *Id.* at 181.

Staff Response to FUSE Contention 23

The Staff opposes the admission of this contention. The contention restates the issues raised in PHASE Contention 44. In order to avoid unnecessary repetition, the Staff incorporates

⁹² As noted in the Staff's Response to PHASE Contentions 2 and 3, the Commission has issued notices of consideration and opportunity for hearing on the proposed indirect license transfer application. See, e.g., "Entergy Nuclear Operations, Inc.; Entergy Nuclear Indian Point 2, LLC; Entergy Nuclear Indian Point 3, LLC; Indian Point Nuclear Generating Unit Nos. 1, 2, and 3; Notice of Consideration of Approval of Application Regarding Proposed Corporate Restructuring and Opportunity for a Hearing," 73 Fed. Reg. 2955 (Jan. 16, 2008).

its response to PHASE Contention 44 herein. For the reasons set forth in response to PHASE Contention 44, this contention should be rejected

FUSE Contention 24

Inability to Access Proprietary Documents Impedes Adequate Review of Entergy Application for License Renewal of IP2 LLC and IP3 LLC.

FUSE Petition, at 185. In support of this contention, FUSE asserts that the Applicant's request that the NRC withhold certain (unspecified) proprietary information from public disclosure, and the NRC's treatment of that information as proprietary, has impeded FUSE's ability to file contentions in this proceeding in a timely manner. *Id.* at 187-90. Further, FUSE alleges that its preparation of contentions has been impeded by the Applicant's redaction of information from Chapter 14 of the FSARs for Units 2 and 3, and by the NRC's withholding of an industry (EPRI) report on Boraflex degradation, as proprietary, *id.* at 190-91. In addition, FUSE complains that it has been hampered by the U.S. Department of Energy's delays in responding to a FOIA request filed by FUSE President Sherwood Martinelli, *id.* at 191-92. For all of these reasons, FUSE asserts that it should be given additional time to file contentions in this proceeding. *Id.* at 192, 193, 203.

Staff Response to FUSE Contention 24

The Staff opposes the admission of this contention. Here, FUSE essentially restates the lengthy assertions made in PHASE Contention 51 and FUSE Contention 1, discussed above. FUSE's claims fail to establish an issue that is appropriate for litigation concerning the LRA's compliance with applicable regulations; and its complaints regarding DOE are beyond the scope of this proceeding. Further, FUSE's complaints regarding the NRC's withholding of proprietary information are mostly general and non-specific – and to the extent that FUSE identifies any

documents at all (e.g., Chapter 14 of the FSARs and an EPRI report), adequate mechanisms are available for FUSE to seek to obtain those materials. FUSE's assertions are addressed at length in the Staff's response to PHASE Contention 51 and FUSE Contention 1; in order to avoid unnecessary repetition, the Staff herein incorporates its response to those two contentions. In sum, FUSE Contention 24 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. §§ 2.309(f)(1)(iii), (iv), (v) and (vi).

FUSE Contention 25

Regulatory Guidance contained in 10 CFR50.4 and Rule Implementing Standards under the American Rules and Procedures Act require Stakeholders to have reasonable opportunity to bring forth issues beyond the narrow scope where members of the public have specific and direct substantiated concerns.

FUSE Petition, at 203. In its statements supporting this contention, FUSE asserts that an "Independent Safety Assessment" ("ISA") should be performed for Indian Point Units 2 and 3 prior to issuance of a renewed license. In particular, FUSE requests that an ISA be performed for the "4.16 KV electrical distribution system, Control Ventilation, containment ventilation" systems. *Id.* at 204.

Staff Response to FUSE Contention 25

The Staff opposes the admission of this contention. As framed by FUSE, the contention is overly vague and fails to identify a specific issue that FUSE seeks to litigate. FUSE's reference to "Rule Implementing Standards under the American Rules and Procedures Act" is unclear, and is incapable of being addressed. Further, apart from its *ipse dixit* assertion that an ISA should be conducted, FUSE fails to make any showing that the performance of an ISA is required for Indian Point or is within the scope of the issues pertinent to license renewal. FUSE Contention 25 should be rejected for failing to satisfy the standards set forth in

10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 26

The LRA, in which Indian Point 2 LLC seeks a new superceding license to replace the existing license, is incomplete and should be dismissed.

FUSE Petition, at 204. In support of this contention, FUSE argues that the Applicant has failed to provide adequate TLAAs and aging management plans, and instead relies upon (unspecified) commitments. *Id.* at 204-05. According to FUSE, this constitutes merely an “agreement to agree,” and renders the LRA incomplete; further, FUSE contends that the acceptance of licensee commitments improperly removes from public scrutiny the adequacy of the plans that will be developed. *Id.* at 206, 210-11.

Staff Response to FUSE Contention 26

The Staff opposes the admission of this contention. Contention 26, as framed by FUSE, is overly vague and fails to identify the issue FUSE seeks to litigate. Here, FUSE essentially restates the assertions made in PHASE Contention 13. Like the PHASE Petitioners, FUSE fails to identify any specific commitments that it contends are inadequate, but instead challenges the acceptability of commitments in principle. The Commission has previously addressed the acceptability of commitments made in a license renewal application -- and explicitly approved this approach -- as discussed above in response to PHASE Contention 13. In order to avoid unnecessary repetition, the Staff herein incorporates its response to that contention. For the reasons stated in response to PHASE Contention 13, FUSE Contention 26 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. §§ 2.309(f)(1)(i), (iv), (v) and (vi).

FUSE Contention 27

The LRA submitted fails to include Final License Renewal Interim Staff Guidance. For example, LR-ISG 2006-03, “Staff guidance for preparing Severe Accident Mitigation Alternatives.”

FUSE Petition, at 211. This contention asserts that the LRA fails to address any Interim Staff Guidance (“ISG”) documents. In its brief basis statement, FUSE asserts that the LRA “failed to include any ISG in its submittal,” and in particular, the LRA failed to address ISG-2006-03, “Staff Guidance for Preparing Severe Accident Mitigation Alternatives.” *Id.* at 211-12.

Staff Response to FUSE Contention 27

The Staff opposes the admission of this contention. FUSE fails to identify any specific portion of the LRA which it contends is deficient. Moreover, the LRA discloses that the Applicant did, in fact, address the Staff’s license renewal ISGs. Thus, Volume 1 of the LRA includes section 2.1.3, “Interim Staff Guidance Discussion.” Further, the LRA specifically addresses ISG-2006-03. See LRA at 2.1-20 – 2.1-21. FUSE Contention 27 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(v) and (vi).

Further, FUSE Contention 27 is identical in all material respects to the first portion of PHASE Contention 14. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 14 herein. As explained in response to PHASE Contention 14, the contention is inadmissible because it lacks specificity and basis. FUSE Contention 27 is inadmissible for the same reasons.

FUSE Contention 28

The Updated Final Safety Report fails to meet the requirements of 10 C.F.R.55(a) [sic] by deletion of required codes and standards, and obviates the ability for a petitioner to perform a technical review as required under 10 CFR 50.4.

FUSE Petition, at 212. In support of this contention, FUSE asserts that the UFSAR for Unit 2 “was altered between the years 2000, and 2006 to remove essentially all codes and standards and therefore is prima facie in violation of federal rules.” *Id.* According to FUSE, without such materials, the operating license cannot ensure safe operation and the protection of public health and safety. *Id.*

Staff Response to FUSE Contention 28

The Staff opposes the admission of this contention. FUSE fails to identify any specific portion of the UFSAR which it contends is deficient, or which codes and standards it contends should have been retained in the UFSAR.⁹³ Moreover, even if FUSE’s assertions are accepted to be correct, this issue pertains to Entergy’s operation of Indian Point Unit 2 under the current license; it fails to raise an appropriate issue for consideration in a license renewal proceeding. Accordingly, FUSE Contention 27 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v) and (vi).

FUSE Contention 29

Inability to Access Proprietary Documents Impedes Adequate Review of Entergy Application for License Renewal of IP2 LLC and IP3 LLC (Specifically, in this case the CLB.

FUSE Petition, at 213. In support of this contention, FUSE argues, again, that (a) it has been deprived access to proprietary documents, *id.* at 213, 215-16, and (b) that FUSE should be given a “complete set of un-redacted versions of the LRA and its underlying documents,

⁹³ The Staff assumes that the contention’s reference to “10 C.F.R. 55(a)” was intended to refer to 10 C.F.R. § 50.55a. FUSE has not shown the relevance of that regulation to a determination of the adequacy of a license renewal application under 10 C.F.R. Part 54.

including but not limited to the FSAR's (all versions), USFAR's [sic] (all versions), [and] the most current and up to date company and/or NRC version of the Current Licensing Basis (CLB)." *Id.* at 217.

Staff Response to FUSE Contention 29

This contention restates, once again, FUSE's request that it be given access to all (unspecified) proprietary information, and any information that was redacted from the FSAR for Units 2 and 3, and that the Applicant and/or the Commission should assemble and provide to FUSE all documents comprising the CLB. The Staff opposes the admission of this contention, for the reasons stated in the Staff's response to PHASE Contention 51, FUSE Contention 1, and FUSE Contention 24, which responses are incorporated by reference herein. In sum, FUSE Contention 29 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(ii), (iii), (iv), (v) and (vi).

FUSE Contention 30

Despite best efforts on the part of the Stakeholders, Entergy's claims of entitlement to Proprietary Information, and the NRC's granting of their request for same have created a situation where petitioners are unable and incapable of properly forming and supporting certain contentions we wish to raise.

FUSE Petition, at 218. In support of this contention, FUSE argues, again, that it requires access to an unredacted version of chapter 14 of the UFSARs for Units 2 and 3; other (unspecified) proprietary documents, including documents relied upon by Entergy in preparing its LRA; and the EPRI study of boraflex degradation. In addition, FUSE again complains that it was impeded in preparing contentions by delays in its receipt of documents from DOE under a FOIA request. *Id.* at 219-21.

Staff Response to FUSE Contention 30

This contention restates assertions made in numerous other contentions, including PHASE Contention 51 and FUSE Contentions 1, 24, and 29. It fails to state a specific issue pertaining to the LRA, fails to identify a genuine dispute of material fact, and fails to state a cognizable issue that is capable of being litigated in this proceeding. The Staff opposes the admission of this contention for these reasons and the reasons set forth in the Staff's responses to PHASE Contention 51 and FUSE Contentions 1, 24, and 29 (which responses are incorporated by reference herein). In sum, FUSE Contention 30 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 31

Safety/Aging Management: Entergy's LRA for Indian Point 2 is insufficient in managing the equipment qualification required by federal rules mandated after Three Mile Island that are required to mitigate numerous design basis accidents to avoid a reactor core melt and to protect the health and safety of the public.

FUSE Petition at 221.

Staff Response to FUSE Contention 31

The Staff opposes the admission of FUSE Contention 31. The contention is substantially the same as PHASE Contention 27, but specific to Unit 2. *Compare* PHASE Petition at 187-202 with FUSE Petition at 221-36. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 27 herein. For the reasons stated in response to that contention, FUSE Contention 31 should be rejected.

FUSE Contention 32

Contention 32-Entergy's License Renewal Application Does Not Include an Adequate Plan to Monitor and Manage Aging of

Plant Piping Due to Flow-Accelerated Corrosion During the
Period of Extended Operation.

Petition at 237.

Staff Response to FUSE Contention 32.

FUSE Contention 32 is identical in all material respects⁹⁴ to PHASE Contention 36. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 36 herein. As explained *supra*, PHASE Contention 36 is inadmissible because it is vague, unsupported and does not raise a genuine, material dispute and must accordingly be rejected. For the reasons stated in response to that contention, FUSE Contention 32 should be rejected.

FUSE Contention 33

Contention 33-Leak-Before-Break analysis is unreliable
for welds associated with high energy line piping
containing certain alloys at Indian Point 2.

Petition at 241.

Staff Response to FUSE Contention 33

FUSE Contention 33 is identical in all material respects to PHASE Contention 35. In order to avoid unnecessary repetition, the Staff incorporates its responses to PHASE Contention 35 herein. As explained *supra*, PHASE Contention 35 is inadmissible because it is outside the scope of this license renewal proceeding, the issue raised is not material to the findings the NRC must make to support a license renewal decision, there is not sufficient information to show that a genuine dispute exists on a material issue of law or fact, and it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309 and must

⁹⁴ While FUSE also cites Ulrich Witte as its expert, Mr. Witte has explicitly stated that he would not provide any expert services for FUSE, and should not be cited in support of FUSE's Petition. See Letter from Ulrich Witte to Sherwin Turk, dated December 12, 2007.

accordingly be rejected. For the reasons stated in response to PHASE Contention 35, FUSE Contention 33 should be rejected.

FUSE Contentions 34,35,36

Contention 34 - IP2 LLC's ineffective Quality Assurance Program violates fundamental independence requirements of Appendix B, and its ineffectiveness furthermore triggered significant cross cutting events during the past eight months that also indicate a broken Corrective Action Program.

Contention 35 - IP2 LLC's ineffective Quality Assurance Program violates fundamental independence requirements of Appendix B, and its ineffectiveness furthermore triggered significant cross cutting events during the past eight months that also indicate a broken Corrective Action Program.

Contention 36-IP2 LLC's ineffective Quality Assurance Program violates fundamental independence requirements of Appendix B, and its ineffectiveness furthermore triggered significant cross cutting events during the past eight months that also indicate a broken Corrective Action Program.

Petition at 244, 246 and 247 respectively.

Staff Response to FUSE Contentions 34, 35, 36

FUSE Contentions 34, 35 and 36 are identical in all material respects to PHASE Contentions 28-32. In order to avoid unnecessary repetition, the Staff response to PHASE Contentions 28-32 is incorporated by reference herein. As explained *supra*, PHASE Contention 28-32 are inadmissible because the Petition fails to demonstrate that the issues raised in these contentions are within the scope of this license renewal proceeding; fails to demonstrate that the issues raised in the contentions are material to the findings the NRC must make to support the license renewal action; and fails to provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact in this proceeding. The contentions are outside the scope of the proceeding as they do not raise any aspect of the

applicants' aging management review, and therefore should be rejected. For the reasons set forth in response to PHASE Contentions 28-32, FUSE Contentions 34, 35 and 36 should also be rejected.

FUSE Contention 37

(Environmental) The Applicant's LRA does not specify, as required in 10[]CFR[]50.65 and 10[]CFR[]50.82(a)(1), an Aging Management plan to monitor and maintain all structures, systems, or components associated with the storage, control, and maintenance of spent fuel in a safe condition, in a manner sufficient to provide reasonable assurance that such structures, systems, and components are capable of fulfilling their intended functions.

FUSE Petition at 248-49.

In support of the Contention 37, FUSE states that there is a leak at IP2's fuel pool, and the AMP does not adequately address it. *Id.* at 249-51. FUSE asserts a history of leaks, and expresses concern about potential consequences. *Id.* at 251-55. FUSE concludes by asserting that:

the NRC cannot approve the Applicant's LRA until the integrity of Spent Fuel Pool #2 is restored, and the leaks from Spent Fuel Pool #2 are fully remediated. *Id.* at 255-56.

Staff Response to FUSE Contention 37

The Staff opposes admission of this contention because it is overly vague. FUSE fails to specify why or how the AMP is inadequate, or to identify its expert support or other facts addressed to the AMP. Further, the concern expressed by FUSE appears to be a concern for current or historical leakage, and fails to raise an issue concerning license renewal.

The 1991 Statement of Consideration noted that "Section 54.29, which defines the standard for issuance of a renewed license, does not require a finding regarding the adequacy of, or compliance with, the plant's licensing basis." 56 Fed. Reg. at 64,961. In modifying the license renewal rule in 1995, the Commission narrowed § 54.29 to the findings to be made for

issuance of a renewed license, and added § 54.30 to address the licensee's responsibilities for addressing safety matters under its current license that are not within the scope of the renewal review. 1995 Statement of Consideration, 60 Fed. Reg. at 22,482. In a nutshell, current operating issues are to be addressed in connection with the existing license, and are not to be addressed again in license renewal proceedings.

Essentially, Contention 37 is a concern for current operations, and fails to raise a matter that is properly within the scope of this license renewal proceeding. Accordingly, it should be rejected.

FUSE Contention 38

(Environmental) The LRA, and the UFSAR's for IP2 inadequately address the currently existing, known and unknown, environmental affects and aging degradation issues of ongoing leaks, and fails to lay out workable aging management plans for said leaks and systems imperative for Safe Shut down and cooling of the reactor.

FUSE Petition at 256. FUSE contends that the LRA fails to provide proof of a proper safety analysis of the reactor coolant pump seal, and fails to provide an AMP. *Id.* at 257. Further, FUSE claims that the feedwater heater for IP2 was improperly placed outside of the scope of license renewal, and that it should be in-scope because loss of feedwater will impose stress on the plant. *Id.* at 257-58. Finally, FUSE contends that the LRA is incomplete because it does not present an aging management plan for underground leaks, and that in pumping out groundwater contamination, Entergy is in violation of its SAFSTOR commitment with the NRC. *Id.* at 270.

Staff Response to FUSE Contention 38

The Staff opposes the admission of this contention, as being outside the scope of the license renewal for Units 2 and 3. First, regarding FUSE's assertion that "the feedwater heater"

should be in scope, FUSE has not specified *which* of the various feedwater heaters it believes should be in scope, nor has FUSE attempted to frame its discussion within the scoping requirements of 10 C.F.R. § 54.4. Regarding reactor coolant pump seals, 10 C.F.R. § 54.21(a)(1)(i) specifically excludes pumps (except for casings) from an aging management review. Accordingly, the allegation that the LRA requires an AMP for the reactor coolant pump seals amounts to an impermissible attack on the Commission's regulations. See 10 C.F.R. § 2.335(a).

Second, regarding a maintenance plan for pipe replacement, FUSE has made no effort to frame this as an issue for renewal, or even to specify which systems or components are of concern. Vagueness precludes the admission of this assertion, pursuant to 10 C.F.R. § 2.309(f)(1)(ii), (iv) and (v).

Third, to the extent that this contention challenges the Applicant's AMPs for leak prevention, this issue was addressed in the Staff's response to New York AG Contention 5. In order to avoid unnecessary repetition, the Staff herein incorporates its response to that contention. FUSE's assertion should be rejected, for the reasons stated in response to New York AG Contention 5.

Fourth, to the extent that FUSE seeks remediation of discovered leaks and ground water contamination, and claims that Entergy is violating the commitment to use the SAFSTOR decommissioning option for Unit 1, whether or not Entergy is violating a prior commitment to use the SAFSTOR decommissioning option for Unit 1 is not an issue to be addressed in license renewal. Any violation, if there is one, would be a current operating issue, not subject to license renewal. Therefore, this contention raises an issue that is outside the scope of license renewal for Units 2 and 3, and should not be admitted.

Finally, many of the assertions made in this contention and its supporting basis statements appear in FUSE Contention 14. *Compare* FUSE Petition at 256-73, *with* FUSE Petition at 128-41. The Staff has previously addressed those similar assertions in its response to FUSE Contention 14. In order to avoid unnecessary repetition, the Staff's response to FUSE Contention 14 is incorporated by reference herein. For the reasons stated therein and above, proposed Contention 38 is inadmissible.

FUSE Contention 39

Current analyses relies [sic] on an assumption that there are no blocked steam generator tubes. Where as [sic] IP2 and IP3 both have corrosion and blocked tubes [sic]. Therefore the SAMA analysis is inadequate. This was recently publicly discussed in ACRS meeting in May 2007, and is the subject of an EPRI report which apparently supports the inadequate current analytical approach. In fact, IP 2 has blocked tubes numbering into the hundreds.

FUSE Petition at 273. No further statements appear in support of this contention. *See id.*

Staff Response to FUSE Contention 39

The Staff opposes the admission of this contention. FUSE Contention 39 lacks specificity and basis and is vague and unsupported. It is, therefore, inadmissible.

FUSE Contention 40

Contention 40 -Applicants have failed to meet the mandates of NEPA, of NRC 10CFR 51.53 post construction environmental reports or of NRC 10CFR 51.21 actions requiring environmental assessments in their applications or have deliberately attempted to conceal refurbishment issues and the risks associated there with from the NRC and/or members of the public.

Petition at 273. FUSE presents a lengthy statement in support of this contention, *id.* at 274-91, which is identical in numerous respects to PHASE Contention 33.

Staff Response to Contention FUSE 40

As stated in response to PHASE Contention 33, the Staff does not oppose the admission of that contention, limited to the issue of whether the Applicant plans to replace the reactor vessel heads at Indian Point Units 2 and 3 as a refurbishment item for license renewal, such that reactor vessel heads should be addressed as a refurbishment item in the Applicant's ER. To that same extent, the Staff does not oppose the admission of FUSE Contention 40. In all other respects, however, the Staff opposes the admission of FUSE Contention 40, for the reasons stated in response to PHASE Contention 33. In order to avoid unnecessary repetition, the Staff incorporates its response to that contention herein.

FUSE Contention 41

Environmental Effects and Cascading Consequences on the Aging structures, deteriorated conditions and compromised systems, of a Terrorist Attack On Aging Indian Point Nuclear Reactors Contention are not considered in the LRA for IP2.

FUSE Petition at 291. FUSE argues that NEPA "requires the NRC and licensee to answer what are the environmental [sic] costs of a successful attack of a terrorist attack on a [n]uclear [r]eactor site." *Id.* at 303.

Staff Response to FUSE Contention 41

The Staff opposes the admission of this contention on the grounds that NEPA does not require the NRC to consider the environmental impact of terrorist acts. This matter is addressed in the Staff's response to PHASE Contention 50.1, *supra*. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 50.1 herein. FUSE Contention 41 should be rejected for the reasons stated in response to PHASE Contention 50.1.

FUSE Contention 42

The License Renewal Application (LRA) fails to provide sufficient detailed information regarding technical, safety and environmental issues as required by 10 CFR 2.309.

FUSE Petition at 314. In support of this contention, FUSE asserts that the LRA fails to provide sufficient information with respect to “safety analysis, aging management plans, internal reactor vessel corrosion, equipment environmental and qualification program, flow accelerated corrosion program, cooling system program and other programs to [sic] numerous to mention.” *Id.* (capitalization omitted). Further, FUSE identifies the program for monitoring corrosion of “aboveground steel tanks” as a matter of concern. *Id.* at 315.

Staff Response to FUSE Contention 42

The Staff opposes the admission of this contention. The contention is overly broad and it fails to identify any requirement in 10 C.F.R. § 2.309 (“Hearing requests, petitions to intervene, requirements for standing and contentions”) which FUSE contends the LRA must satisfy. Further, nowhere in the contention does FUSE identify a single specific portion of the LRA which it contends is deficient. FUSE Contention 42 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 43

Co-mingling three dockets, and three DPR licenses under a single application is in violation of C.F.R. Rules, Specifically 10 CFR 54.17 (d) as well as Federal Rules for Civil Procedure rule 11(b).

FUSE Petition at 317. In this contention, FUSE again presents various assertions presented in its other contentions, regarding the commingling of applications. See *id.* at 317-19. As an example of different systems in place at Units 2 and 3, it states that the Unit 2 spent fuel pool has a “boraflex monitoring program,” while the Unit 3 spent fuel pool has a “boral surveillance program.” *Id.* at 320-21.

Staff Response to FUSE Contention 43

The Staff opposes the admission of this contention. This contention restates the issues raised in PHASE Contention 1 and FUSE Contention 21. In order to avoid unnecessary repetition, the Staff's responses to PHASE Contention 1 and FUSE Contention 21 are herein incorporated by reference. FUSE's reference to differences between the Unit 2 and Unit 3 spent fuel pool systems do not establish any reason to believe that a single application for the renewal of Units 2 and 3 is improper. Further, FUSE fails to point to any specific portion of the LRA which it believes does not adequately account for differences between Units 2 and 3, including differences in their spent fuel pool systems. FUSE Contention 43 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 44

The NRC violates its own regulations by accepting a single License Renewal Application made by the following parties: Entergy Nuclear Indian Point 2, LLC ("IP2 LLC"), Entergy Nuclear Indian Point 3, LLC ("IP3 LLC"), and Entergy Nuclear Operations, LLC. (Entergy Nuclear Operations). NRC further violates its own regulations found in 10 CFR 51 in considering Entergy's recent request to change the holder of record for IP1, IP2 and IP3. Additionally, the NRC is wrongfully allowing Entergy to do one stop filing (IE, filing one set of papers to change ownership status of five SEPARATE licensed reactors) in a fleet like manner, even though each reactor is owned by separate LLC's.

FUSE Petition at 321. In support of this contention, FUSE asserts that Entergy's pending application for indirect license transfer, submitted on July 30, 2007, should not be granted, in that the proposed corporate structure is overly complicated and would allow the parent company to evade responsibility for accidents at Indian Point, *id.* at 323-25. Further, FUSE alleges that the corporate structure described in the LRA is inaccurate, based on the corporate structure depicted in the indirect license transfer application, *id.* at 322. According to FUSE, the

proposed ownership structure for Indian Point Units 2 and 3 would adversely affect Entergy's financial qualifications for Indian Point Units 2 and 3 and the public's health and safety. *Id.* at 324.

Staff Response to FUSE Contention 44

The Staff opposes the admission of this contention. This contention restates, with little modification, the issues that were raised in PHASE Contention 3 and FUSE Contention 22. In order to avoid unnecessary repetition, the Staff incorporates herein its responses to those two contentions. Further, as stated in response to PHASE Contention 2 and FUSE Contention 22, the indirect license transfer application is outside the scope of this proceeding. In sum, FUSE Contention 44 should be rejected for failing to meet the requirements of 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v), and (vi).

FUSE Contention 44-B

The NRC has no statutory authority to require a licensee in bankruptcy to continue making safety-related or decommissioning expenditures or to pay retrospective Price-Anderson Act premiums. Therefore, any transfer of the licenses in the middle of an LRA proceeding brings into scope Entergy's entire corporate structure and complex financial qualification review to continue operating the licenses during the license renewal period of 20 years.

FUSE Petition at 325. In this contention, FUSE essentially asserts that the indirect transfer application should not be considered, or should be rejected and returned to Entergy, until the conclusion of this license renewal proceeding. *Id.* at 326. In support of this assertion, FUSE states that consideration of the indirect transfer application will divert Staff resources from reviewing the LRA; and that the General Accounting Office ("GAO") has previously found the NRC conducted an inadequate review of license transfers. *Id.* at 325-26.

Staff Response to FUSE Contention 44-B

The Staff opposes the admission of this contention. In essence, FUSE here presents, as a separate contention, an almost *verbatim* restatement of several paragraphs that appear in two other contentions – PHASE Contention 3 and FUSE Contention 22. See PHASE Petition at 38-40; FUSE Petition at 174-75. In order to avoid unnecessary repetition, the Staff’s responses to PHASE Contention 3 and FUSE Contention 22 are herein incorporated by reference. As stated in the Staff’s response to those contentions, Entergy’s indirect license transfer application is beyond the scope of this proceeding; further, this contention is overly vague, and fails to identify any deficiency in the Applicant’s LRA. FUSE Contention 44-B should be rejected for failing to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v), and (vi).

FUSE Contention 45

The Decommissioning Trust Fund is woefully inadequate and Entergy’s plan to mix funding across Unit 2, 1 and 3 violates commitments not acknowledged in the application and *10 CFR rule 54.3*. (We Specifically Address This to IP3, though wording is similar to other contentions.

FUSE Petition at 327. In support of this contention, FUSE presents essentially a repetition of FUSE Contention 23, with references to Unit 3 instead of Unit 2. *Compare* FUSE Petition at 327-38 *with* FUSE Petition at 176-85.

Staff Response to FUSE Contention 45

The Staff opposes the admission of this contention. In essence, the contention fails to raise an issue that is properly within the scope of this license renewal proceeding, and for the reasons stated in the Staff’s response to FUSE Contention 23. In order to avoid unnecessary repetition, the Staff’s response to FUSE Contention 23 is incorporated by reference herein.

FUSE Contention 45B

Since, Cask storage is slated to begin in 2008, and the renewed license for IP2 and IP3 if granted will expire in 2033 and 2035 respectively, it is imperative that the licensee and the NRC deal with the fact that Entergy in their LRA have not provided a full and complete plan to deal with the waste streams generated and stored at the facility, and the issue of dry cask storage units reaching their end lives has to be dealt with before a new superceding license can be granted. Stakeholders herein claim this as a new contention.

FUSE Petition at 334. In this contention, Petitioner asserts that Entergy's decommissioning plan does not adequately address the storage of spent nuclear fuel on the Indian Point site after the period of extended operation has ended. *Id.*

Staff Response to FUSE Contention 45B

The Staff opposes the admission of this contention. In essence, the contention fails to raise an issue that is properly within the scope of this license renewal proceeding, and for the reasons stated in the Staff's response to FUSE Contention 23. In order to avoid unnecessary repetition, the Staff's response to FUSE Contention 23 is incorporated by reference herein.

FUSE Contention 45C

As a host site, it is imperative that we receive the necessary assurances that Indian Point will not become a permanent waste disposal site for Indian Point's waste streams. Guarantees/commitments written into the new superceding license, coupled with yearly fines of say \$5 million per fuel rod paid to the local community should the 30 year time period be violated, would guarantee a far greater chance of the NRC, DOE and Entergy abiding by the Federal Laws that require said waste streams to be removed and safely stored OFF SITE. Stakeholders again claim this as a additional contention. It is imperative that final disposition of these waste streams be resolved before a new superceding license is granted to Entergy for Indian Point, since many of the spent fuel waste streams should have already been removed from the site as a term of the original license to operate.

FUSE Petition at 335. In this contention, Petitioner asserts that Entergy's decommissioning plan does not adequately address the storage of spent nuclear fuel on the Indian Point site after the period of extended operation has finished. *Id.*

Staff Response to FUSE Contention 45C

The Staff opposes the admission of this contention. In essence, the contention fails to raise an issue that is properly within the scope of this license renewal proceeding, and for the reasons stated in the Staff's response to FUSE Contention 23. In order to avoid unnecessary repetition, the Staff's response to FUSE Contention 23 is incorporated by reference herein.

FUSE Contention 46

Inability to Access Proprietary Documents Impedes Adequate Review of Entergy Application for License Renewal of IP2 LLC and IP3 LLC.

FUSE Petition, at 338. This contention restates FUSE's assertions regarding its alleged need for access to proprietary documents, unredacted versions of the UFSARs, and a compilation of the current licensing basis for Units 2 and 3. *Id.* at 338-58.

Staff Response to FUSE Contention 46

The assertions made in this contention and its supporting basis statements appear repeatedly in FUSE's Petition, as well as in the PHASE Petition. In particular, these assertions appear in PHASE Contention 51 and FUSE Contention 24. *Compare* FUSE Petition at 338-58, *with* FUSE Petition at 185-203 *and* PHASE Petition at 338-82. The Staff has previously addressed the assertions made in this contention, in its responses to PHASE Contention 51 and FUSE Contention 24, as well as in response to FUSE Contentions 1, 29 and 30. In order to avoid unnecessary repetition, those responses are incorporated by reference herein. For the

reasons stated therein, FUSE Contention 46 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 47

Regulatory Guidance contained in 10 CFR50.4 and Rule Implementing Standards under the American Rules and Procedures Act require Stakeholders to have reasonable opportunity to bring forth issues beyond the narrow scope where members of the public have specific and direct substantiated concerns as relate to IP3 specifically.

FUSE Petition, at 358. In its statements supporting this contention, FUSE again asserts, as it asserted in FUSE Contention 25, that an ISA should be performed for Indian Point Units 2 and 3 prior to issuance of a renewed license. In particular, FUSE requests that an ISA be performed for the “4.16 KV electrical distribution system, Control Ventilation, containment ventilation” systems. *Id.* at 359.

Staff Response to FUSE Contention 47

This contention restates, almost verbatim, the assertions made in FUSE Contention 25. The Staff opposes the admission of this contention, for the reasons stated in response to FUSE Contention 25; in order to avoid unnecessary repetition, the Staff’s response to FUSE Contention 25 is incorporated by reference herein. FUSE Contention 47 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 48

The LRA, in which Indian Point 3 LLC seeks a new superseding license to replace the existing license, is incomplete and should be dismissed. Instead of presenting required Time Limiting Aging Analysis and an Adequate Aging Management Plan, it seeks to agree to uncertain commitments with regard to the Aging Management of the plant at an uncertain date in the future, thereby causing the license agreement to be voidable by either party, but specifically the Licensee.

FUSE Petition, at 359. In support of this contention, FUSE argues that the Applicant has failed to provide adequate TLAAAs and aging management plans, and instead relies upon (unspecified) commitments. *Id.* at 360-63. According to FUSE, this constitutes merely an “agreement to agree,” and renders the LRA incomplete; further, FUSE contends that the acceptance of licensee commitments improperly removes from public scrutiny the adequacy of the plans that will be developed. *Id.* at 363-66.

Staff Response to FUSE Contention 48

The Staff opposes the admission of this contention. FUSE Contention 48 restates, in substantially the same words, the assertions presented in FUSE Contention 26 and PHASE Contention 13. *Compare* FUSE Petition at 359-66 *with* FUSE Petition at 204-211, *and* PHASE Petition at 106-112. In order to avoid unnecessary repetition, the Staff herein incorporates its responses to those contentions. For the reasons stated in the Staff’s response to PHASE Contention 13 and FUSE Contention 26, FUSE Contention 48 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(iv), (v) and (vi).

FUSE CONTENTION 49

The LRA as relates to IP3 that was submitted fails to include Final License Renewal Interim Staff Guidance. For example, LR-ISG 20006-03, ‘Staff guidance for preparing Severe Accident Mitigation Alternatives.’

FUSE Petition at 366.

Staff Response to FUSE Contention 49

The Staff opposes the admission of this contention. FUSE Contention 49 is identical in all material respects to the first portion of PHASE Contention 14. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 14 herein. As explained in

the Staff's response to PHASE Contention 14, the contention is inadmissible because it lacks specificity and basis. FUSE Contention 49 is inadmissible for the same reasons.

FUSE Contention 50

The Updated Final Safety Analysis Report (UFSAR) for IP3 fails to meet the requirements of 10 C.F.R.55(a) by deletion of certain required codes and standards, and obviates the ability of a petitioner to perform a technical review as required under 10 CFR 50.4.

FUSE Petition, at 368. In support of this contention, FUSE argues that the UFSAR for Unit 3 “was altered between the years 2000, and 2006 to remove essentially all codes and standards and therefore is prima facie in violation of federal rules.” *Id.* According to FUSE, without such materials, the operating license cannot ensure safe operation and the protection of public health and safety. *Id.*

Staff Response to FUSE Contention 50

This contention essentially restates FUSE Contention 28, but replaces any references to Unit 2 with references to Unit 3. The Staff opposes the admission of this contention for the reasons set forth in response to FUSE Contention 28, *supra*. In order to avoid unnecessary repetition, the Staff incorporates its response to FUSE Contention 28 herein. For the reasons stated therein, FUSE Contention 50 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v) and (vi).

FUSE Contention 51

The Applicant does not have in its possession the Current License Basis (CLB) for Indian Point 3, that is required for license renewal per CFR 2.390.

FUSE Petition at 369. In support of this contention, FUSE argues that “[t]he Applicant is required to have in its possession and control the precise current license basis“ for Units 2

and 3, and that FUSE should be given a document containing the complete CLB, in order for it to be able to formulate contentions. *Id.* at 369-70.

Staff Response to FUSE Contention 51

This contention restates, once again, FUSE's request that the Applicant and/or the Commission should assemble and provide to FUSE all documents comprising the CLB – an issue which was raised in numerous other contentions, including PHASE Contentions 12 and 51, and FUSE Contentions 1, 29, and 46.⁹⁵ In order to avoid unnecessary repetition, the Staff herein incorporates its response to those contentions. The Staff opposes the admission of this contention, for the reasons stated in the Staff's response to PHASE Contentions 12 and 51, and FUSE Contentions 1, 29, and 46. In sum, FUSE Contention 51 should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 51-A

This may explain the NRC comment that there is no list of exemptions that the Licensee intends to carry over into the new superceding license, and we would like that A) in writing, and if it is put in writing, we would ask the board to note that no exemptions (regardless of the word used to describe them-IE deviation, exceptions and exclusion) from the existing license are to be carried over to, and made a part of the new superceding license. This is a separate sub-contention and request.

FUSE Petition at 370. In support of this contention, FUSE asserts that the CLB for Indian Point Units 2 and 3 is unknown; that "pertinent parts of the CLB are required under 10 CFR § 2.309 to be available to Stakeholders regarding license renewal"; that FUSE must be given complete,

⁹⁵ FUSE's intention in referring to "CFR 2.390" is unclear; however, whatever FUSE's intention may have been, the cited regulation provides no support for this contention.

unredacted versions of “the LRA and its underlying documents, including but not limited to the FSAR’s (all versions), USFAR’s (all versions), the most current and up to date company and/or NRC version of the Current Licensing Basis.” *Id.* at 370-71. FUSE further asserts that the time for submitting contentions should be deferred until after it has received those documents, *id.* at 370, and that Entergy’s LRA must be denied because the CLB required for license renewal under 10CFR2.336 is unavailable and unknown.” *Id.* at 372.

Staff Response to FUSE Contention 51-A

This contention is substantially similar to, and appears to have been lifted from, the basis statements provided for PHASE Contention 51 and FUSE Contention 29. *Compare* FUSE Petition at 370-372 *with* FUSE Petition at 214-17 *and* PHASE Petition at 103-106. The contention lacks adequate factual and legal basis; moreover, even if FUSE’s pleading deficiencies were overlooked, the Commission has explicitly stated that the CLB need not be assembled for license renewal. 1991 Statement of Consideration, 56 Fed. Reg. at 64,949 – 951. Further, FUSE’s reference to 10 C.F.R. § 2.336 (“General discovery”) is to no avail; as that regulation nowhere states or suggests that the CLB must be provided to petitioners in a license renewal proceeding – especially inasmuch as the Commission has explicitly stated that the CLB need not be assembled or reviewed in a license renewal proceeding. *See, e.g.*, 1991 Statement of Consideration, 56 Fed. Reg. at 64,949-952. For these reasons, and the reasons stated above in response to PHASE Contention 51 and FUSE Contention 29 (which responses are incorporated by reference herein), FUSE Contention 51-A should be rejected for failing to satisfy the standards set forth in 10 C.F.R. § 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

FUSE Contention 52

Safety/Aging Management: Applicant’s LRA for Indian Point 3

LLC is insufficient in managing the environmental equipment qualification required by federal rules mandated after Three Mile Island that are required to mitigate numerous design basis accidents to avoid a reactor core melt and to protect the health and safety of the public.

FUSE Petition at 372. In support of Contention 52, FUSE essentially repeats the arguments made by PHASE in support of Contention 27.

Staff Response to FUSE Contention 52

The Staff opposes the admission of FUSE Contention 52. The contention is substantially the same as PHASE Contention 27, but is specific to Unit 3. *Compare* PHASE Petition at 187-202 *with* FUSE Petition at 372-87. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 27 herein. FUSE Contention 52 should be rejected for the reasons stated in response to PHASE Contention 27.

FUSE Contention 53

Contention 53 - Entergy's License Renewal Application Fails to Include an Adequate Plan to Monitor and Manage Aging of IP3 Plant Piping Due to Flow-Accelerated Corrosion During the Period of Extended Operation.

FUSE Petition at 387.

Staff Response to FUSE Contention 53

FUSE Contention 53 is identical in all material respects⁹⁶ to PHASE Contention 36. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 36 herein. Like PHASE Contention 36, this contention is inadmissible because it is vague,

⁹⁶ While FUSE also cites Mr. Witte as its expert, FUSE does so in disregard of Mr. Witte's statement that he will no longer provide expert services on behalf of FUSE.

unsupported and does not raise a genuine, material dispute. For these reasons, as more fully stated in response to PHASE Contention 36, this contention should be rejected.

FUSE Contention 54

Contention 54 - Leak-Before-Break analysis is unreliable for welds associated with high energy line piping containing certain alloys at Indian Point 3.

FUSE Petition at 392.

Staff Response to FUSE Contention 54

The Staff opposes the admission of this contention. FUSE Contention 54 is identical in all material respects to PHASE Contention 35. In order to avoid unnecessary repetition, the Staff incorporates its response to PHASE Contention 35 herein. For the reasons stated in that response, the contention is inadmissible because it is outside the scope of this license renewal proceeding, the issue raised is not material to the findings the NRC must make to support a license renewal decision, there is not sufficient information to show that a genuine dispute exists on a material issue of law or fact, and it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309. Accordingly, FUSE Contention 54 should be rejected.

FUSE Contention 55

(Environmental) The Applicant's LRA for IP3 does not specify, as required in 10[]CFR50.65 and 10[]CFR[]50.82(a)(1), an Aging Management plan to monitor and maintain all structures, systems, or components associated with the storage, control, and maintenance of spent fuel in a safe condition, in a manner sufficient to provide reasonable assurance that such structures, systems, and components are capable of fulfilling their intended functions.

FUSE Petition at 399 (emphasis in original). In support of Contention 55, FUSE essentially repeats the arguments it made in support of FUSE Contention 37. *Compare* FUSE Petition at 248-56 *with Id.* at 399-406.

Staff Response to FUSE Contention 55.

The Staff opposes the admission of FUSE Contention 55 for the reasons discussed in the Staff's response to FUSE Contention 37. In order to avoid unnecessary repetition, the Staff incorporates its response to that contention herein. For the reasons stated in the Staff's response to FUSE Contention 37, FUSE Contention 55 should be rejected.

FUSE Contention 56

Contention 56-The LRA, and the UFSAR's for IP3 inadequately address the currently existing, known and unknown, environmental affects and aging degradation issues of ongoing leaks, and fails to lay out workable aging management plans for said leaks and systems imperative for Safe Shut down and cooling of the reactor.

FUSE Pettion at 392.

Staff Response to FUSE Contention 56

FUSE Contention 56 is identical in all material respects to PHASE Contention 37. In order to avoid unnecessary repetition, the Staff incorporates its response to that contention herein. As explained in response to PHASE Contention 37, this contention is inadmissible because it is outside the scope of this license renewal proceeding, the issue raised is not material to the findings the NRC must make to support a license renewal decision, there is not sufficient information to show that a genuine dispute exists on a material issue of law or fact, and it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309. Accordingly, FUSE Contention 56 should be rejected.

Fuse Contention 57

Contention 57-The Applicant has failed in its LRA for IP3 LLC to include as part of the EIS Supplemental Site Specific Report any refurbishment plans in order to meet the mandates of NEPA, of

NRC 10CFR 51.53 post construction environmental reports or of NRC 10CFR 51.21.

FUSE Petition at 420.

Staff Response to Contention 57

FUSE Contention 57 is identical in numerous respects to PHASE Contention 33, and FUSE Contention 40. *Compare* FUSE Petition at 420-33 *with id.* at 273-91, *and* PHASE Petition at 208-26. In order to avoid unnecessary repetition, the Staff incorporates its response to those contentions herein. For the reasons stated, the Staff does not oppose the admission of this contention, limited to the issue of whether the Applicant plans to replace the reactor vessel heads as a refurbishment item that should be addressed in the ER. In all other respects, the Staff opposes the admission of the contention, for the reasons stated in response to PHASE Contention 33.

FUSE Contention 58

Environmental Effects and Cascading Consequences on the Aging structures, deteriorated conditions and compromised systems, of a Significant Aerial Accident or Terrorist Attack On Aging Indian Point Nuclear Reactors are not considered in the LRA for IP2.

FUSE Petition at 433. FUSE asserts, "NEPA demands that the possible failure of those systems or programs, such as security, and the environmental costs/impacts of their failure are within scope." *Id.* at 441. The Petitioner relies on the Ninth Circuit's decision in *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), in arguing that "the NRC must take into consideration the environmental effects of a successful terrorist attack." *Id.* at 442. Finally, FUSE challenges the adequacy of the NRC's Design Basis Threat ("DBT") for nuclear reactors. *Id.* at 440-47.

Staff Response to FUSE Contention 58

The Staff opposes the admission of this contention. This contention raises claims that are substantially similar to claims made in PHASE Contention 50. In order to avoid unnecessary repetition, the Staff incorporates its response to that contention herein. In sum, the contention should be rejected because NEPA does not require the NRC to consider the environmental impact of terrorist acts, as described in the Staff's response to PHASE Contention 50, *supra*. Further, FUSE's challenges to the DBT raises matters that concern current operations, and are not a proper subject for consideration in a license renewal proceeding. For these reasons, FUSE Contention 58 should be rejected.

FUSE Contention 58 [59]⁹⁷

The radiological discharges, both legal and illegal, known and unknown from Indian Point 3, LLC are causing elevated cancer rates in the 50 mile EPZ which includes portions of Connecticut, New Jersey, and New York. Said elevated cancers are causing premature deaths, painful mastectomies in women who are getting non-hereditary breast cancers, and our children are being struck down with leukemia, as a result of Indian Point 3 LLC operations. The death of just one child in the name of Indian Point License Renewal is unacceptable, elevated cancer rates, especially breast cancer is and [sic] unacceptable price to ask any community to pay in the name of "National Interests" and NEI's dearly beloved Nuclear Renaissance.

FUSE Petition at 452-53.

Staff Response to FUSE Contention 58 [59]

⁹⁷ This contention is numbered "58" in the FUSE Petition, at 452. The FUSE petition, however, contains another "Contention 58" at 433. There is no "Contention 59." Therefore, the NRC Staff has titled this contention "Contention 59."

The Staff opposes the admission of this contention. FUSE Contention 59 does not raise any issue amenable to adjudication in this proceeding and is, therefore, inadmissible. It does not tie any of its statements to any portion of the application and so lacks specificity. Finally, it is unsupported by any relevant evidence.

Further, FUSE Contention 59 constitutes an impermissible attack on Commission regulations. It challenges 10 C.F.R. § 51.95(c), which provides that the Commission will make its license renewal decision based, in part, on NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" ("GEIS") (May 1996) for issues designated as "Category 1" issues and 10 C.F.R. § 51.53(c)(i) that provides that a license renewal applicant need not include an analysis of such generic issues in its environmental report. Category 1 issues are listed in Appendix B to 10 C.F.R. Part 51 and include radiation exposure to the public during the license renewal period. As the Commission made clear, in the GEIS and in Appendix B to Part 51, it has made a generic determination regarding the environmental impact of radiation exposure during the license renewal period. That determination covers all applicants for license renewal and the impact has been determined to be small for all plants. It is not subject to attack in an adjudicatory proceeding. *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 343 (1999). The regulations at 10 C.F.R. § 2.335(b) explicitly prohibit such an approach. As the Commission stated recently in the *Vermont Yankee* and *Pilgrim* license renewal proceedings, "[f]undamentally, any contention on a 'Category 1' issue amounts to a challenge to our regulation that bars challenges to generic environmental findings." *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Station), *Entergy Nuclear General Company and Entergy Nuclear*

Operations, Inc. (Pilgrim Nuclear Power Station), CLI-07-03, 65 NRC 13, 20 (2007).⁹⁸ The Commission did note that the rule at 10 C.F.R. § 2.335(b) could be waived and that, in theory, “approval of a waiver could allow a contention on a Category 1 issue to proceed where special circumstances exist.” *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC at 20.

In tacit acknowledgement that Category 1 issues are outside of the scope of this proceeding, on October 23, 2007, FUSE petitioned for a waiver of 10 C.F.R. § 2.335.⁹⁹ The Commission referred this request to the Licensing Board, and on November 21, 2007 the Board denied the Petition. The Board noted that FUSE’s submission was deficient, and allowed it until December 17, 2007 to file an amended petition.¹⁰⁰ FUSE never filed an amended petition for waiver, and no approval of waiver was granted. Accordingly, FUSE’s contention on a Category 1 issue must be rejected.

Finally, FUSE proffers no relevant material in support of Contention 59. FUSE cites two documents: a study regarding the effects of radiation exposure at a nuclear reprocessing plant in the United Kingdom; and a meta-analysis of 17 research papers regarding 136 nuclear sites in the United Kingdom, Canada, France, Germany, Japan, Spain, and the United States. In addition, FUSE includes quotes from an article that argues, among other things, that radiation from nuclear weapon testing caused infant deaths and childhood cancer in upstate New York. On their face, neither of these documents is relevant in this proceeding, on the issue of

⁹⁸ See also *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 13-15 (2001).

⁹⁹ Letter from Sherwood Martinelli to NRC Chairman Dale Klein, dated October 23, 2007.

¹⁰⁰ “Order (Authorizing FUSE to Submit a Section 2.335 Petition),” dated November 21, 2007, at 3

environmental impacts associated with license renewal for Indian Point Units 2 and 3. The contention should be rejected.

III. Requests for Relief

A. Request for a Subpart G Proceeding

FUSE claims that it is entitled to a hearing conducted under Subpart G of 10 C.F.R. Part 2. FUSE states it “is entitled to a full adjudicatory hearing with all the rights of discovery and cross-examination” because it (1) has standing and (2) raises substantial issues of fact and law that meet the requirements of 10 C.F.R. § 2.310(d). FUSE Petition at 35. As demonstrated below, these reasons do not satisfy regulatory requirements for a Subpart G hearing; therefore, FUSE’s request should be denied.

Under the regulations set forth in 10 C.F.R. Part 2, a proceeding involving a license renewal application must ordinarily follow procedures for an informal hearing set forth in 10 C.F.R. Part 2, Subpart L. See 10 C.F.R. § 2.310(a); 69 Fed. Reg. 2182, 2222 (Jan. 14, 2004) (Adjudicatory Process Final Rule). In order for a license renewal application proceeding (or portions thereof) to be subject to Subpart G procedures, the presiding officer must find that one or more particular admitted contentions necessitates resolution of (1) issues of material fact relating to the occurrence of a past activity, where the credibility of an eyewitness may reasonably be expected to be at issue,¹⁰¹ and/or (2) issues of motive or intent of the party or eyewitness material to the resolution of the contention. 10 C.F.R. § 2.310(d); *Entergy Nuclear*

¹⁰¹ The first criterion contains two elements. The first is a dispute of material fact concerning the occurrence of a past activity include the nature of the activity and details, and the second is that the credibility of the eyewitness may reasonably be expected to be at issue. See 69 Fed. Reg. at 2222. This does not include disputes between parties over qualifications or professional “credibility” of witnesses. *Id.*

Vermont, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-04-31, 60 NRC 686, 694 (2004). Additionally, a petitioner should demonstrate, “by *reference to the contention* and the basis provided and the *specific procedures in Subpart G*, that resolution of the contention necessitates resolution of material issues of fact which may be best determined through the use of the identified [Subpart G] procedures.” 69 Fed. Reg. at 2221 (emphasis added). See also *Vermont Yankee*, LBP-04-31, 60 NRC at 693 (quoting 10 C.F.R. § 2.309(g)). If a presiding officer determines that one or more contentions meet the criteria in § 2.310(d) while one or more contentions do not, separate hearings will be held; therefore, Subpart G procedure determinations are contention-specific. 69 Fed. Reg. at 2222.

Petitioners in other proceedings have failed in attempts to widen the scope of situations in which Subpart G proceedings are allowed. For example, six generic arguments, all of which are relevant here, have already been heard and rejected by the Licensing Board in another proceeding. In *Vermont Yankee*, New England Coalition argued that it was entitled to a Subpart G proceeding on its contentions because (1) the complexity of the issues requires a Subpart G process; (2) § 189a of the Atomic Energy Act (“AEA”) provides for a full and fair public hearing; (3) the case had a high degree of public interest, and was controversial, and therefore discovery and cross-examination were essential to assure public confidence in the outcome; (4) Subpart L is too “convoluted” and Subpart G proceedings are faster and more efficient; (5) the applicant may not fully comply with its disclosure duties under § 2.336(a); and (6) the Staff said in its brief in *Citizens Awareness Network, Inc. v. United States*, 391 F.3d 338 (1st Cir. 2004), that “factual disputes, regardless of whether credibility of eyewitnesses [is] at issue, may form the basis for a right to cross-examine witnesses.” *Vermont Yankee*, LBP-04-31, 60 NRC at 695-98. As a general response to all six arguments, the Licensing Board stated that most “were considered and rejected by the Commission in the comments and debate leading to the promulgation of the

Adjudicatory Process Final Rule. The remaining arguments are essentially attacks on the Commission regulations and are not appropriate in this adjudicatory proceeding.” *Id.* at 696.

FUSE fails to reference any of the actual criteria, let alone identify any issues of material fact relating to a past activity where the credibility of an eyewitness would be expected to be at issue in this proceeding, or specify an issue of motive or intent which would be material to the resolution of any stated contentions. See FUSE Petition at 35. The broad assertions that FUSE has standing and that substantial issues of fact and law are at play plainly do not satisfy the requirements for a Subpart G hearing, as they are not related to a past activity at issue in this proceeding where the credibility of an eyewitness may be at issue, nor do they correlate to any issues of motive or intent of a party or eyewitness material to the resolution of a proposed contention. Further, if this was all that was necessary for a Subpart G proceeding, then every petitioner would qualify, thus completely disregarding the Commission’s rationale for the Part 2 amendments, which were intended “to make the NRC’s hearing process more effective and efficient” and “to move away from the trial-type, adversarial format to resolve technical disputes’ believing that ‘in most instances, the use of the full panoply of formal, trial-like adjudicatory procedures . . . is not essential to the development of an adequate hearing record’.” *Vermont Yankee*, LBP-04-31, 60 NRC at 692, quoting 69 Fed. Reg. at 2182.

Additionally, FUSE does not relate the request for a Subpart G proceeding to a particular contention, or contentions. See FUSE Petition at 35. Commission regulations indicate that a successful request must proffer a specific reason why that contention, or contentions, necessitates Subpart G formality. See, e.g., 10 C.F.R. § 2.310(d) (“where the presiding officer by order finds that resolution of the contention . . . necessitates resolution of issues of material fact . . .”). Petitioner’s request for a Subpart G proceeding lacks such a showing, as the request is not correlated to any specific contention or issue of material fact. Rather, FUSE contends that

the subject of the license amendment request “raises substantial issues of fact and law” and therefore it is entitled to a Subpart G proceeding. FUSE Petition at 35. The Commission specifically eliminated "numerous and complex issues" as a basis for a Subpart G proceeding. See 69 Fed. Reg. at 2204-05 (“Common sense, as well as case law, lead the Commission to conclude that oral hearings with right of cross-examination are best used to resolve issues where 'motive, intent, or credibility are at issue, or if there is a dispute over the occurrence of a past event'.”) Petitioner also fails to identify which procedures in Subpart G are necessary to resolve any material issues of fact, as required when demonstrating the need for a Subpart G proceeding. See 69 Fed. Reg. at 2221.

As Petitioners have not satisfied the requirements set forth for a Subpart G proceeding, the request should be denied.

CONCLUSION

For the reasons set forth above, the NRC Staff respectfully submits that WestCAN, RCCA, PHASE, and FUSE have demonstrated their standing to intervene in this proceeding, but the Sierra Club and Assemblyman Brodsky have not done so, Further, while the PHASE

Petitioners and FUSE have proffered at least one admissible contention, FUSE's flagrant disregard of the Commission's Rules of Practice and numerous Orders issued in this proceeding warrant that FUSE's Petition be dismissed. Finally, the Staff respectfully submits that the Petitioners' contentions should be rejected except to the extent set forth above.

Respectfully submitted,

/RA/

Sherwin E. Turk
Counsel for NRC Staff

/RA/

Lloyd B. Subin
Counsel for NRC Staff

/RA/

Beth N. Mizuno
Counsel for NRC Staff

/RA/

David E. Roth
Counsel for NRC Staff

Dated at Rockville, Maryland
this 22nd day of January 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
ENTERGY NUCLEAR OPERATIONS, INC.) Docket Nos. 50-247/286-LR
)
(Indian Point Nuclear Generating)
Units 2 and 3))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "NRC STAFF'S RESPONSE TO PETITIONS FOR LEAVE TO INTERVENE FILED BY (1) WESTCHESTER CITIZEN'S AWARENESS NETWORK, ROCKLAND COUNTY CONSERVATION ASSOCIATION, PUBLIC HEALTH AND SUSTAINABLE ENERGY, SIERRA CLUB – ATLANTIC CHAPTER, AND ASSEMBLYMAN RICHARD BRODSKY, AND (2) FRIENDS UNITED FOR SUSTAINBLE ENERGY,USA", dated January 22, 2008, have been served upon the following through deposit in the NRC's internal mail system, with copies by electronic mail, as indicated by an asterisk, or by deposit in the U.S. Postal Service, first class mail, as indicated by double asterisk, with copies by electronic mail this 22nd day of January, 2008:

Lawrence G. McDade, Chair*
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
E-mail: LGM1@nrc.gov

Office of Commission Appellate
Adjudication*
U.S. Nuclear Regulatory Commission
Mail Stop: O-16G4
Washington, DC 20555-0001
E-mail: OCAAMAIL@nrc.gov

Dr. Richard E. Wardwell*
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
E-mail: REW@nrc.gov

Office of the Secretary*
Attn: Rulemaking and Adjudications Staff
Mail Stop: O-16G4
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: HEARINGDOCKET@nrc.gov

Dr. Kaye D. Lathrop*
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
E-mail: KDL2@nrc.gov

Zachary S. Kahn*
Law Clerk
Atomic Safety and Licensing Board Panel
Mail Stop – T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: ZXC1@nrc.gov

Atomic Safety and Licensing Board Panel*
U.S. Nuclear Regulatory Commission
Mail Stop: T-3 F23
Washington, DC 20555-0001

William C. Dennis, Esq.**
Assistant General Counsel
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601
E-mail: wdennis@entergy.com

Kathryn M. Sutton, Esq.**
Paul M. Bessette, Esq.**
Martin J. O'Neill, Esq.**
Morgan, Lewis & Bockius, LLP
1111 Pennsylvania Avenue, NW
Washington, D.C. 20004
E-mail: ksutton@morganlewis.com
E-mail: pbessette@morganlewis.com
E-mail: martin.o'neill@morganlewis.com

Michael J. Delaney, Esq.**
Vice President – Energy Department
New York City Economic Development
Corporation (NYCEDC)
110 William Street
New York, NY 10038
E-mail: mdelaney@nycedc.com

Susan H. Shapiro, Esq.**
21 Perlman Drive
Spring Valley, NY 10977
E-mail: mbs@ourrocklandoffice.com

Arthur J. Kremer, Chairman**
New York Affordable Reliable Electricity
Alliance (AREA)
347 Fifth Avenue, Suite 508
New York, NY 10016
E-mail: ajkremer@rmfpc.com
kremer@area-alliance.org

John LeKay**
FUSE USA
351 Dyckman Street
Peekskill, NY 10566
E-mail: fuse_usa@yahoo.com

Manna Jo Greene**
Hudson River Sloop Clearwater, Inc.
112 Little Market Street
Poughkeepsie, NY 12601
E-mail: MannaJo@clearwater.org

Justin D. Pruyne, Esq.**
Assistant County Attorney
Office of the Westchester County Attorney
148 Martine Avenue, 6th Floor
White Plains, NY 10601
E-mail: jdp3@westchestergov.com

Daniel E. O'Neill, Mayor**
James Seirmarco, M.S.**
Village of Buchanan
Municipal Building
Buchanan, NY 10511-1298
E-mail: vob@bestweb.net

John J. Sipos, Esq.**
Charlie Donaldson, Esq.**
Assistants Attorney General
New York State Department of Law
Environmental Protection Bureau
The Capitol
Albany, NY 12224
E-mail: john.sipos@oag.state.ny.us

Joan Leary Matthews, Esq.**
Senior Attorney for Special Projects
New York State Department of
Environmental Conservation
Office of the General Counsel
625 Broadway, 14th Floor
Albany, NY 12233-1500
E-mail: jimatthe@qw.dec.state.ny.us

Diane Curran, Esq.**
Harmon, Curran, Spielberg & Eisenberg,
LLP
1726 M Street, NW, Suite 600
Washington, D.C. 20036
E-mail: dcurran@harmoncurran.com

Robert Snook, Esq.**
Office of the Attorney General
State of Connecticut
55 Elm Street
P.O. Box 120
Hartford, CN 06141-0120
E-mail: robert.snook@po.state.ct.us

Daniel Riesel, Esq.**
Thomas F. Wood, Esq.**
Ms. Jessica Steinberg, J.D.**
Sive, Paget & Riesel, P.C.
460 Park Avenue
New York, NY 10022
E-mail: driesel@sprlaw.com
jsteinberg@sprlaw.com

Ms. Nancy Burton**
147 Cross Highway
Redding Ridge, CT 06876
E-mail: nancyburtonct@aol.com

Victor Tafur, Esq.**
Phillip Musegaas, Esq.
Riverkeeper, Inc.
828 South Broadway
Tarrytown, NY 10591
E-mail: phillip@riverkeeper.org
vtafur@riverkeeper.org

Richard L. Brodsky, Esq.**
5 West Main St.
Elmsford, NY 10523
E-mail: brodskr@assembly.state.ny.us
richardbrodsky@msn.com

/RA/

Sherwin E. Turk
Counsel for NRC Staff