

From: Sherwin Turk
To: "Indian Point Service List" <>
Date: 1/22/2008 11:50:14 PM
Subject: Indian Point License Renewal - NRC Staff Response to Seven Petitions
cc: "Christopher Chandler" <CCC1.OWGWPO03.HQGWDO01@nrc.gov>,"Beth Mizuno" <BNM1.TWGWPO01.HQGWDO01@nrc.gov>,"Brian Newell" <BPN1.TWGWPO01.HQGWDO01@nrc.gov>,"Kimberly Sexton" <KAS2.TWGWPO02.HQGWDO01@nrc.gov>,"Lloyd Subin" <LBS3.TWGWPO02.HQGWDO01@nrc.gov>,"bo pham" <BMP@nrc.gov>,"David Roth" <DER.TWGWPO03.HQGWDO01@nrc.gov>,"Edward Williamson" <ELW2@nrc.gov>,"Karl Farrar" <KLF@nrc.gov>,"Richard Conte" <RJC@nrc.gov>

Attached please find the "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.

Copies of the attached document are also being served by First Class U.S. Mail and internal NRC mail.

Sherwin E. Turk
Special Counsel for Litigation
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Mail Stop O-15-D-21
Washington, D.C. 20555
(301) 415-1533 (phone)
(301) 415-3725 (fax)

Hearing Identifier: IndianPointUnits2and3NonPublic
Email Number: 363

Mail Envelope Properties (479762F0.HQGWDO01.OWGWPO04.200.2000015.1.16A1D7.1)

Subject: Indian Point License Renewal - NRC Staff Response to Seven Petitions
Creation Date: 1/22/2008 11:50:14 PM
From: Sherwin Turk

Created By: SET@nrc.gov

Recipients

"Christopher Chandler" <CCC1.OWGWPO03.HQGWDO01@nrc.gov>
"Beth Mizuno" <BNM1.TWGWPO01.HQGWDO01@nrc.gov>
"Brian Newell" <BPN1.TWGWPO01.HQGWDO01@nrc.gov>
"Kimberly Sexton" <KAS2.TWGWPO02.HQGWDO01@nrc.gov>
"Lloyd Subin" <LBS3.TWGWPO02.HQGWDO01@nrc.gov>
"bo pham" <BMP@nrc.gov>
"David Roth" <DER.TWGWPO03.HQGWDO01@nrc.gov>
"Edward Williamson" <ELW2@nrc.gov>
"Karl Farrar" <KLF@nrc.gov>
"Richard Conte" <RJC@nrc.gov>
"Indian Point Service List" <>

Post Office

OWGWPO04.HQGWDO01

Route

nrc.gov

Files

MESSAGE
012208- NRC Staff Response to Seven Petitions.pdf
1/23/2008 3:53:20 PM

Size

720

Date & Time

1/22/2008 11:50:14 PM
483207

Options

Priority: Standard
Reply Requested: No
Return Notification: None
None

Concealed Subject:

No

Security:

Standard

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) 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

Sherwin E. Turk
Lloyd B. Subin
Beth N. Mizuno
David E. Roth

January 22, 2008

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. State of New York	9
2. Clearwater	9
3. Connecticut Attorney General Richard Blumenthal.	11
4. CRORIP and Nancy Burton.	12
5. Riverkeeper.	13
6. Town of Cortlandt.	15
7. Westchester County.	15
II. Admissibility of the Petitioners' Proffered Contentions.	16
A. Legal Requirements for Contentions.	16
1. General Requirements for Admissibility.	16
2. Scope of License Renewal Proceedings.	20
B. Analysis of the Petitioners' Proposed Contentions.	25
1. State of New York	25
2. Clearwater.	89
3. Connecticut Attorney General Richard Blumenthal	103
4. CRORIP.	107
5. Riverkeeper.	109

6.	Town of Cortlandt.	122
7.	Westchester County.	132
III.	Other Requests for Relief.	133
	CONCLUSION	135

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) 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

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 by (1) the State of Connecticut ("Connecticut"), represented by Connecticut Attorney General Richard Blumenthal ("Connecticut AG"),¹ (2) Connecticut Residents Opposed to Relicensing of Indian Point ("CRORIP") and Nancy Burton,² (3) Hudson River Sloop Clearwater, Inc.

¹ See "Petition for Leave to Intervene, Request for Hearing and Contentions of Richard Blumenthal, Attorney General of Connecticut, for the License Renewal Proceeding for Indian Point Nuclear Generating Unit Nos. 2 and 3, DPR-26 and DPR-64" ("Connecticut Petition" or "Conn. Petition"), filed November 30, 2007.

² See "Connecticut Residents Opposed to Relicensing of Indian Point and Its Designated Representative's Petition to Intervene and Request for Hearing" ("CRORIP Petition"), filed December 10, 2007.

("Clearwater"),³ (4) the State of New York ("New York"), represented by its Attorney General ("New York AG"),⁴ (5) Riverkeeper, Inc. ("Riverkeeper"),⁵ (6) the Town of Cortlandt, NY ("Cortlandt"),⁶ and (7) Westchester County, NY ("Westchester").⁷

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 of the petitioners' proposed contentions.⁸ As more fully set forth below, each of these petitioners has established its standing to intervene in this proceeding; however, certain of the petitioners (*i.e.*, Connecticut, Cortlandt, CRORIP and Ms. Burton, Clearwater and Westchester) have failed to proffer an admissible contention, and therefore, in accordance with 10 C.F.R. § 2.309(a), those petitioners' requests to intervene in this proceeding should be denied.

³ See "Hudson River Sloop Clearwater Inc's Petition to Intervene and Request for Hearing" ("Clearwater Petition"), filed December 10, 2007.

⁴ See "New York State Notice of Intention to Participate and Petition to Intervene" ("New York Petition" or "NY Petition"), filed November 30, 2007.

⁵ See "Riverkeeper, Inc.'s Request for Hearing and Petition to Intervene in the License Renewal Proceeding for the Indian Point Nuclear Power Plant" ("Riverkeeper Petition"), filed November 30, 2007.

⁶ See Town of Cortlandt's "Request for Hearing and Petition to Intervene" ("Cortlandt Petition"), filed November 29, 2007.

⁷ See "Westchester County's Notice of Intention to Participate and Petition to Intervene" ("Westchester Petition"), filed December 7, 2007.

⁸ The Staff is filing, simultaneously herewith, its response to two other petitions for leave to intervene. See NRC Staff's Response to Petitions for Leave to Intervene Filed by (1) Westchester Citizen's Awareness Network [{"WestCAN"}], Rockland County Conservation Association [{"RCCA"}], Public Health and Sustainable Energy [{"PHASE"}], Sierra Club – Atlantic Chapter [{"Sierra Club"}], and Assemblyman Richard Brodsky, and (2) Friends United for Sustainable Energy, USA [{"FUSE"}], dated January 22, 2008 (hereinafter referred to as "Staff Response to PHASE/FUSE Petitions").

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.⁹ 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.¹⁰ The current licenses for Indian Point Units 2 and 3 expire on 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

⁹ Letter from Fred Dacimo, Site Vice President (Entergy) to NRC Document Control Desk, dated April 23, 2007 (ADAMS Accession No. ML0712101080), as supplemented by letters dated May 3 and June 21, 2007 (ADAMS Accession Nos. ML0712807000 and ML0718003180).

¹⁰ Units 2 and 3 share the site with Indian Point Unit 1. The LRA states, “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.

LRA at 1-7.

the period specified in the current licenses, *i.e.*, until September 28, 2033, and December 12, 2035, respectively. LRA at 1-1, 1-4, 1-6.

On May 11, 2007, the NRC published a notice of receipt of the Indian Point LRA,¹¹ and on August 1, 2007, the NRC published a notice of acceptance for docketing and notice of opportunity for hearing on the LRA.¹² The Notice required that petitions for leave to intervene and requests for hearing be filed by October 1, 2007;¹³ this deadline was later extended to November 30, 2007,¹⁴ 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").¹⁵ Petitions for leave to 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

¹¹ "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).

¹² "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).

¹³ *Id.*, 72 Fed. Reg. at 42,135.

¹⁴ "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).

¹⁵ The Commission granted FUSE an extension of time for filing 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 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.

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.¹⁶

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.¹⁷ Since that time, the Licensing Board has issued a number of Orders addressing procedural requirements and administrative matters,¹⁸ and it denied the petitions for leave to intervene which had been filed by three organizations that failed to proffer an admissible contention.¹⁹ Following the dismissal of those petitions, nine petitions for leave to intervene remain before the Licensing Board – the seven petitions addressed in this Response, and two other petitions (the PHASE and FUSE Petitions), which are addressed in a separate response filed simultaneously herewith.

¹⁶ The Staff is filing a separate 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.

¹⁷ “Establishment of Atomic Safety and Licensing Board,” 72 Fed. Reg. 60,394 (Oct. 24, 2007).

¹⁸ 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, *aff’d*, 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.

¹⁹ 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.

DISCUSSION

I. Standing to Intervene

A. Applicable Legal Requirements

In accordance with the Commission's Rules of Practice,²⁰ "[a]ny person²¹ 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

²⁰ See "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," 10 C.F.R. Part 2.

²¹ "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).²² 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).²³

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 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.”

²² 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.*

²³ 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).

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 148.²⁴

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 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

²⁴ The Commission has not yet ruled specifically on 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).

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. State of New York

Pursuant to 10 C.F.R. § 2.309(d)(2), the State of New York need not address the issue of standing, because Indian Point is located within the State's boundaries. Accordingly, New York may participate in this proceeding as a matter of right.

2. Clearwater

Clearwater seeks to establish representational standing to intervene, based on the individual standing of its members. See Clearwater Petition at 6-7.²⁵ Twenty-eight individuals submitted affidavits stating that they reside within 50 miles of Indian Point, that they are members of Clearwater and would like Clearwater to represent their interests in this matter. *Id.*,

²⁵ Clearwater also alleges organizational standing to intervene, claiming that its interests as an organization could be harmed by “health and safety risks” presented by license renewal. Clearwater Petition at 4-10. However, it fails to show how its interests could be adversely affected by health and safety risks – which pertain to human health, not the “health” of an organization. In addition, Clearwater seeks discretionary intervention under 10 C.F.R. § 2.309(e), Petition at 10-11. These requests need not be considered, however, inasmuch as Clearwater has established its representational standing to intervene as of right.

Exhibits 1.1 – 1.26. Clearwater seeks to participate in hearings on the license renewal application, due to concerns about the safety and environmental impacts of plant operations during the renewal term. Clearwater Petition at 4-5; Exhibits 1.1 – 1-26, *passim*. Regardless of whether any of its members' allegations establish a concrete or particularized injury caused by the challenged action that would be redressed by a favorable decision in this proceeding, Clearwater has established its standing to intervene under the proximity presumption, based on the location of its members' residences within 50 miles of Indian Point.

As discussed above, under the doctrine of representational standing, an organization may demonstrate standing based on the interests of its members. The 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. Clearwater makes this showing by identifying 28 names and addresses of members who may be affected by issuance of a renewed license. Further, Clearwater demonstrates that these members have authorized it to represent them in this proceeding, as stated in their Declarations attached to the Petition. Clearwater Exhibit 1.1 – 1.26, Standing Declarations. As discussed above, the Petition demonstrates the requisite element, that members would have standing to intervene in their own right, based on the proximity presumption. For these reasons, Clearwater has satisfied the requirements necessary to establish representational standing. Accordingly, Clearwater has met the requirements for standing to intervene in this proceeding.

3. Connecticut Attorney General Richard Blumenthal

The Connecticut Attorney General states that he seeks to intervene "on behalf of the State of Connecticut," and that he "brings this petition in his capacity as the chief legal officer

representing the legal interests of Connecticut residents.” Conn. Petition at 1.²⁶ In this regard, he asserts that Connecticut has standing under 10 C.F.R. § 2.309(d)(2), stating that governmental entities may “intervene as of right in proceedings affecting nuclear power stations ‘within [their] boundaries.’” *Id.* at 5. Alternatively, the Connecticut Attorney General argues that the Board should grant Connecticut discretionary intervention pursuant to § 2.309(e). *Id.*

The Connecticut Attorney General’s reliance on § 2.309(d)(2) is misplaced. The Indian Point facility is not located in Connecticut, so the provision that grants standing “as of right” to a governmental body within whose borders a facility is located, is inapplicable. Further, the Connecticut Attorney General has not met the requirements for discretionary intervention. Pursuant to § 2.309(e), a petitioner seeking discretionary intervention must address six factors in his or her petition to intervene. The Connecticut AG does not address any of those factors, and therefore fails to establish that Connecticut should be granted discretionary intervention.

However, notwithstanding this conclusion, the Staff does not contest Connecticut’s standing to intervene in this proceeding. The Connecticut Attorney General asserts that Indian Point is located 12 miles from the Connecticut border, and a large portion of the State of Connecticut is located within 50 miles of the facility. See Conn. Petition at 5. As discussed above, this is sufficient to establish presumptive standing based upon the State’s proximity to the facility. Accordingly, the Staff does not oppose the State of Connecticut’s standing to intervene in this proceeding.

²⁶ Elsewhere in his Petition, the Attorney General states that he resides in Greenwich, CT, and he asserts that “Petitioner, individually and in his capacity as chief legal officer of the state, is affected and aggrieved” by the proposed license renewal. Conn. Petition at 4, 5. While these statements appear to suggest that Mr. Blumenthal may wish to intervene as an individual, he nowhere specifies his residential address or his activities in the area, and he does not specify how his interests would be adversely affected by this proceeding. Accordingly, he has not established his individual standing to intervene herein.

4. CRORIP and Nancy Burton

CRORIP seeks to establish representational standing based on the individual standing of two of its members, Lally Codrianski and Gail Merrill. CRORIP Petition at 2, 3.

Ms. Codrianski submitted a notarized Declaration, in which she states that she resides in Greenwich, CT, and provides her street address; she further states that she is a member of CRORIP, that she has concerns about the safety and health impacts of Indian Point operation under the license renewal term, and she authorizes CRORIP to represent her interests in this proceeding. Declaration of Lally Codrianski, at 1, 2. Gail Merrill similarly states that she resides New Canaan, CT, and provides her street address; she further states that she has concerns about the safety and health impacts of Indian Point operation during the license renewal term, and she authorizes CRORIP to represent her interests in this proceeding. Declaration of Gail Merrill, at 1.²⁷ CRORIP seeks to participate in license renewal hearings on their behalf, with respect to whether the plant's operations are adequate to assure safe operation for an additional twenty years without compromising public health and safety. See id.

With respect to Ms. Burton, she filed a Declaration in which she stated that she lives at a given street address in Redding Ridge, CT, which, she states, is located approximately 25 miles from Indian Point²⁸. Burton Declaration at [unnumbered] 1. She states that she is a member of CRORIP and has been authorized to represent that organization in this proceeding; further, she expresses her concern over risks to her health and safety posed by operation of the facility during the license renewal term, including risks that would be created by an accident or

²⁷ The Staff has verified, using online mapping tools, that both Ms. Codrianski's and Ms. Merrill's residences are located approximately 30 miles of the Indian Point facility.

²⁸ An online search revealed that a Nancy Burton resides at the given street address, albeit in a neighboring town -- Redding, CT 06896. This address is approximately 40 miles from the Indian Point facility.

attack, routine radiological releases, and the accumulation and storage of radioactive waste at the facility. *Id.* at [unnumbered] 2-3. Ms. Burton does not state that she authorizes CRORIP to represent her in this proceeding; rather, she states that she “act[s] in this matter both as an individual and as designated representative for CRORIP.” *Id.* at 3.; emphasis added.

While Ms. Codrianski, Ms. Merrill and Ms. Burton express their concerns regarding the risk of an accident or attack on Indian Point and any resulting release of radiation, they do not establish that they have suffered or would suffer any concrete or particularized injury caused by the challenged action that would be redressed by a favorable decision in this proceeding. However, based on the location of their residences within 50 miles of Indian Point, the proximity presumption applies; accordingly, the Staff does not contest their individual standing to intervene. Further, based on Ms. Codrianski’s and Ms. Merrill’s individual standing and their authorization for CRORIP to represent them in this proceeding, it appears that CRORIP has established its representational standing to intervene. *See Int’l Uranium (USA) Corp. (White Mesa Uranium Mill)*, LBP-97-14, 46 NRC at 56; *Yankee Rowe*, LBP-98-12, 47 NRC at 354-55. Accordingly, based on the proximity presumption, the Staff does not contest CRORIP’s representational standing or Ms. Burton’s individual standing to intervene in this proceeding.

5. Riverkeeper

Riverkeeper seeks to establish both organizational and representational standing to intervene in this proceeding. With respect to its organizational standing, Riverkeeper alleges that its offices are located in Tarrytown, NY, approximately 22 miles from Indian Point. Riverkeeper Petition at 3. Riverkeeper states that its offices house the organization’s records and archives, as well as its computer equipment, database, furnishings and equipment. *Id.* at 3-4; Declaration of Stella Liroso (Standing Exhibit 1). Riverkeeper further states that it is concerned about license renewal due to the risk of a radiological release that could contaminate

its property and cause long-lasting health and environmental damage. Riverkeeper Petition at 4; Lirosi Declaration at 2.

With respect to representational standing to intervene, Riverkeeper asserts that it has standing based on the individual standing of four of its members: Alan A. Hembeger, Andre P. Mele, Nancy Syrop, and Glenn Rickles. *Id.* at 5. Riverkeeper's members submitted Declarations stating their addresses and the distances from their homes to Indian Point (all located within 6 to 36 miles of the facility). They express their concerns over operation of the facility during the license renewal term, and state that they are members of Riverkeeper and authorize Riverkeeper to represent their interests in this matter due to their concerns about the renewal of Indian Point's licenses. *See id.* at 5; Standing Exhibits 2-5.

Riverkeeper appears to have established its standing to intervene in this proceeding, based, at least, on its representational standing to represent its members herein. With respect to representational standing, Riverkeeper has identified the names and addresses of members who may be affected by issuance of a renewed license, and who have authorized that organization to represent them in this proceeding. The Petition demonstrates that Riverkeeper's members would have standing to intervene in their own right, based on the proximity presumption. Thus, as stated above, regardless of whether it or its members have established a concrete or particularized injury caused by the challenged action that would be redressed by a favorable decision, Riverkeeper has established standing under the proximity presumption, based on the location of its members' residences within 50 miles of Indian Point. Accordingly, the Staff does not contest Riverkeeper's standing to intervene in this proceeding.

6. Town of Cortlandt

In its Petition, the Town of Cortlandt seeks to establish standing as a local government body under 10 C.F.R. § 2.309(d)(2). To support this, Cortlandt states that the Town is made up of two incorporated villages: Croton-on Hudson and Buchanan. Cortlandt Petition at 1. Indian

Point Units 2 and 3 are located in the Village of Buchanan, which is located within the Town of Cortlandt. *Id.* As such, Cortlandt has standing to intervene under 10 C.F.R. § 2.309(d)(2), and it need not address the other standing requirements of 10 C.F.R. § 2.309(d).²⁹

7. Westchester County

As stated above, Indian Point Units 2 and 3 are situated within the Town of Cortlandt and the Village of Buchanan, which are themselves located in Westchester County, NY. Westchester County correctly argues that inasmuch as the facility is located within its boundaries, the county has standing to intervene in this proceeding under 10 C.F.R. § 2.309(d)(2) and it need not address the other standing requirements of 10 C.F.R. § 2.309(d). Westchester Petition at 1-2. Accordingly the Staff does not oppose Westchester County's standing to intervene in this proceeding as a matter of right.³⁰

II. Admissibility of the Petitioners' Proffered Contentions

A. Legal Requirements for Contentions

1. General Requirements for Admissibility.

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

²⁹ In the event that its petition to intervene as a party is denied, Cortlandt also seeks to participate as an interested governmental entity, under 10 C.F.R. § 2.315(c). Cortlandt Petition at 2. If Cortlandt's Petition is denied and a hearing is held, the Staff would not oppose Cortlandt's request to participate as an interested governmental entity under § 2.315(c).

³⁰ Like the Town of Cortlandt, Westchester County requests that it be permitted to participate as an interested governmental entity under 10 C.F.R. § 2.315(c), to make a limited appearance, and to submit an *amicus curiae* brief if its petition to intervene is denied. Westchester Petition at 3. In the event that a hearing is held and Westchester's petition to intervene is denied, the Staff would not oppose its request to participate under § 2.315(c) or to make a limited appearance statement. With respect to Westchester County's request to submit an *amicus curiae* brief, the Board had previously denied a similar request because NRC regulations do not permit the submission of *amicus* briefs at this point in the proceedings. See Order "Denying Westchester County's Request for a 30-Day Extension of Time Within Which to Submit an Amicus Curiae Brief" dated November 28, 2007.

(formerly § 2.714(b)).³¹ 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 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

³¹ 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).

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).³²

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.³³ 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; (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

³² 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).

³³ 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.

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.²

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

² 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.

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 54,³⁴ 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).

(b) Any applicable requirements of Subpart A of 10 C.F.R. 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

³⁴ See generally, Statement of Consideration, "Nuclear Power Plant License Renewal," 56 Fed. Reg. 64,943 (Dec. 13, 1991) (hereinafter referred to as "1991 Statement of Consideration"); Statement of Consideration, "Nuclear Power Plant License Renewal; Revisions," 60 Fed. Reg. 22,461 (May 8, 1995) (hereinafter referred to as "1995 Statement of Consideration").

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 10.³⁵ 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.

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.

³⁵ 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.

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;³⁶ 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 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.*

³⁶ 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.

(Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 17 (footnotes omitted), *reconsid. 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. State of New York

New York AG Contention 1

The License Renewal Application (LRA) violates 10 C.F.R. § 54.13 because it is neither complete nor accurate and thus, in order to protect the due process and 42 U.S.C. § 2239 rights of the intervenors, the Board should suspend the hearing until the Applicant files an amended application in compliance with 10 C.F.R. § 54.13.

NYAG Petition at 36. In support of this contention, New York presents numerous arguments, including assertions that (a) the Updated Final Safety Analysis Report ("UFSAR") for Indian Point Units 2 and 3 fails to include an analysis of "new and significant earthquake information," fails to comply with General Design Criteria ("GDC") applicable to these plants, and fails to mention or address certain GDC, *id.* at 36-37; (b) the LRA allegedly fails to contain certain aging management programs and/or relies upon commitments to develop such programs, relies on documents that are not publicly available, and omits information which the Staff is seeking in Requests for Additional Information ("RAIs"), *id.* at 37; and (c) the Environmental Report ("ER") ignores new information regarding the risks of severe accidents due to earthquakes or terrorist activities, improperly assumes that the plants' nuclear waste will be sent to a high level waste disposal facility by 2025; and fails to consider realistic alternatives and economic impacts of

continued operation, *id.* at 37-38. As a result, New York argues that the LRA is not “complete and accurate in all material respects” as required by 10 C.F.R. § 54.13, that the Staff improperly accepted the LRA for docketing, that the public should not have to meet the standards for filing late contentions when new information is provided by the Applicant, and that the proceeding should be suspended until the Applicant provides the details needed to complete its LRA. *Id.* at 38-48.

Staff Response to New York AG Contention 1

The Staff opposes the admission of New York AG Contention 1, in that it (a) improperly raises an issue (the Staff’s determination to accept the LRA for docketing) that is not subject to litigation; (b) challenges the basic structure of the Commission’s regulatory process, insofar as it challenges the NRC’s determination that a proceeding may commence when the Staff determines that an application is “sufficiently complete” for it to docket the application and undertake a review thereof -- subject to the submission of late-filed contentions when new information becomes available; (c) constitutes nothing more than the State’s generalized view of what applicable policies ought to be, in its assertion that the State and members of the public should not be required to devote time and resources to litigation until the LRA is more complete; (d) seeks to raise an issue which is not proper for adjudication in the proceeding; and (e) seeks to raise an issue which is not concrete or litigable. *Peach Bottom, supra*, 8 AEC at 20-21.

As the Commission has stated, a license renewal application must be “essentially complete and sufficient” when filed; however, once the Staff has made an initial determination that this standard has been met, the application may be docketed, subject to supplementation later. Moreover, as the State acknowledges (NYAG Petition at 43), the Staff’s determination whether an application is sufficiently complete to be accepted for docketing is not subject to challenge in an adjudicatory proceeding:

Renewal applications should be essentially complete and sufficient when filed. Section 9(b) of the APA [Administrative Procedures Act] confers the benefit of “timely renewal” to those who make a timely filing of a “sufficient application.” . . . The Commission discourages the filing of pro-forma renewal applications that would be filed simply for the sake of meeting the 10 C.F.R. 2.109(b) deadline. However, a determination that an application is sufficient for purposes of timely renewal would not be litigable. Sufficiency is essentially a matter for the staff to determine based on the required contents of an application established in §§ 54.19, 54.21, 54.22, and 54.23. It is enough that the licensee submits the required reports, analyses, and other documents required in such application. That such documents may require further supplementation or review is of no consequence to continued operation under timely renewal.³⁷

See also *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 280-281 (2005); *Baltimore Gas and Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), LBP-98-26, 48 NRC 232, 242-43 (1998).

Further, it is well established that “the agency’s licensing review procedures, including 10 C.F.R. § 2.102, contemplate an ongoing process in which the application may be modified or improved.” *Calvert Cliffs, supra*, 48 NRC at 243; *New England Power, supra*, 7 NRC at 281. The Staff’s post-acceptance issuance of RAIs is a well-established part of that dynamic process; neither the Staff’s issuance of RAIs, nor an applicant’s supplementation or amendment of its application (including its aging management programs), supports the suspension of an adjudicatory proceeding on the application. Rather, the Commission’s regulatory and adjudicatory processes contemplate that if and when new information arises, a petitioner may file a new or amended contention, subject to the late-filing requirements in 10 C.F.R.

³⁷ 1991 Statement of Consideration, 56 Fed. Reg. at 64,963. As the Commission noted, the NRC has issued regulatory guidance to assist applicants in preparing license renewal applications and to assist the Staff in “judging whether the criterion of a sufficient application is met.” *Id.* Currently, that guidance is contained principally in NUREG-1800, “Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants,” Rev. 1 (Sept. 2005) (“SRP-LR”). Additional guidance is provided in NUREG-1801, “Generic Aging Lessons Learned (GALL) Report,” Rev. 1 (Sept. 2005).

§ 2.309(f)(2). Thus, New York's assertions that the Applicant's LRA and/or ER fail to include or address significant new information, even if correct, do not support its assertion that the proceeding should be suspended until the application is supplemented.

With respect to New York's assertions that the UFSAR for Indian Point Units 2 and 3 is deficient and that Units 1 and 2 currently fail to comply with applicable GDCs, those issues pertain to the current licensing basis ("CLB") and the operation under the current operating licenses; these issues are outside the permissible scope of this license renewal proceeding. See 10 C.F.R. § 54.3(a); 1991 Statement of Consideration, 56 Fed. Reg. at 64,951; *Turkey Point*, CLI-01-17, 54 NRC at 7, 9-10, 23. Similarly, New York's assertion that the LRA fails to mention or address applicable GDC fails to raise an admissible issue, inasmuch as an applicant for license renewal is not required to compile the CLB³⁸ nor is an applicant required to establish current compliance with the CLB. 1991 Statement of Consideration, 56 Fed. Reg. at 64,951. Nor do these assertions establish grounds to suspend this proceeding. Accordingly, New York AG Contention 1 should be rejected.

New York AG Contention 2

The license renewal application for IP2 and IP3 fails to comply with the requirements of 10 C.F.R. §§ 54.21 and 54.29(a)(1) and (2) since information from safety analyses and evaluations performed at the NRC's request are not identified or included in the UFSAR and thus it is not possible to determine which systems and components important for safety require aging management or what type of aging management they require.

NYAG Petition at 48. In support of Contention 2, the State of New York provided examples of what the State believed to be safety evaluations performed by Indian Point licensees in response to NRC generic correspondence that are not reflected within the FSARs. *Id.* at 59-70.

³⁸ 1995 Statement of Consideration, 60 Fed. Reg. at 22,473-74.

Specific examples include safety analyses performed in response to NRC Bulletin 84-03 ("Refueling Cavity Water Seal") and NRC Bulletin 94-01 ("Potential Fuel Pool Draindown Caused By Inadequate Maintenance Practices At Dresden Unit 1"). *Id.* at 61-63 and 70. New York also provided the supporting declaration of its witness David Lochbaum, along with a report and table prepared by Mr. Lochbaum, listing documents that Mr. Lochbaum believes show that the UFSAR for Indian Point is not currently in compliance with 10 C.F.R. § 50.71(e). See Declaration of David Lochbaum and attached report entitled "Indian Point Energy Center, 10 C.F.R. 50.71(e), and License Renewal."

Staff Response to New York AG Contention 2

The Staff opposes the admission of Contention 2, because, as explained below, the allegation that the UFSAR does not currently meet § 50.71(e) is a matter not subject to license renewal review. If there is not reasonable assurance during the current license term that licensed activities will be conducted in accordance with the CLB, the licensee is required to take measures under its current license, as appropriate, to ensure that the intended function of those systems, structures or components will be maintained in accordance with the CLB throughout the term of its current license. 10 C.F.R. § 54.30(a). The licensee's obligation to take compliance measures is not within the scope of the license renewal review. 10 C.F.R. § 54.30(b).

The CLB includes the NRC regulations contained in 10 C.F.R. Part 50, plant-specific design-basis information as documented in the most recent final safety analysis report (FSAR) as required by 10 C.F.R. § 50.71 and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports. 10 C.F.R. § 54.3. Compliance with § 50.71(e) is a current issue, outside the scope of license renewal in accordance with 10 C.F.R. § 54.30(a).

The proffered contention states that if a submitted analysis is not in the UFSAR, it will not be possible to conduct the license renewal review. The Commission already broadly addressed this issue, stating:

The definition of CLB in §54.3(a) states that a plant's CLB consists, in part, of "a licensee's written commitments * * * that are docketed * * *" Because these documents have already been submitted to the NRC and are in the docket files for the plant, they are not only available to the NRC for use in the renewal review, they are also available for public inspection and copying in the Commission's public document rooms. Furthermore, the NRC may review any supporting documentation that it may wish to inspect or audit in connection with its renewal review.

60 Fed. Reg. 22,474.³⁹ Thus, completion of the CLB is not required to support a license renewal review.

The New York AG alleged that failure to place the licensee's responses in the FSAR makes it impossible to ascertain the adequacy of the aging management programs for IP2 and IP3; however, New York has not explained why this is so, since the responses are available for review. Further, New York has made no showing that the Applicant failed to treat the responses as part of the CLB. In sum, New York AG Contention 2 is not admissible because it is a current compliance issue, not an aging management topic, and it fails to establish an issue appropriate for consideration in this license renewal proceeding.

New York AG Contention 3

The LRA does not comply with the requirements of 10 C.F.R. §§ 54.29(a)(1) and (2) for IP2 and IP3 because it is not possible to ascertain if all relevant equipment, components and systems that

³⁹ The CLB consists of "the NRC regulations contained in 10 C.F.R. parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 52, 54, 55, 70, 72, 73, 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications [plus] . . . the plant-specific design-basis information [contained] . . . in the most recent final safety analysis report (FSAR) . . . and the licensee's commitments . . . [made through] responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports." 10 C.F.R. § 54.3.

are required to have aging management have been identified or to determine whether the aging management requirements for license renewal have been met.

NYAG Petition at 72. To support this contention, New York argues that the Applicant is not in compliance with the relevant GDC, as required by § 54.35, and that there are significant safety gaps between proposed GDC and "legally relevant" GDC. NYAG Petition at 72-73. New York states that for IP2, the UFSAR shows that the plant was designed to a trade association's version of 1967 general design criteria, and IP3 was based on a revised 1967 version of draft general design criteria. *Id.* at 73. New York also alleges that the UFSAR is inaccurate in describing the GDC. *Id.* New York provides the supporting declaration of Mr. Paul Blanch, who includes a table to illustrate some of the differences between the 1967 Draft GDC and the re-stated criteria from the UFSAR submitted with the LRA. Declaration of Paul Blanch and attached table entitled "Comparison of Published (32 FR 10213) General Design Criteria with stated criteria contained within the Indian Point UFSARS."

New York alleges that although compliance with GDC 50 is stated, the UFSARs have reworded GDC 50 and changed its intent. NYAG Petition at 74. New York also alleges that the UFSARs have reworded and changed the intent of GDC 47 by removing the words "test periodically the delivery capability" and, consequently, that the LRA failed to discuss any aging management program ("AMP") to assure that the delivery capability of the emergency core cooling system ("ECCS") will meet GDC 47. *Id.* at 74-75. Finally, the AG asserts that IP3 makes no commitment to comply with GDC 34, and that IP2 has altered the meaning of GDC 34. *Id.* at 75-76.

Staff Response to New York AG Contention 3

The Staff opposes the admission of NYAG Contention 3. Prior to and separate from the current proceeding, the Director of the NRC's office of Nuclear Reactor Regulation ("NRR") responded to a petition filed pursuant to 10 C.F.R. § 2.206 by Mr. Paul Blanch and Mr. Arnold

Gundersen, in which they asserted, in part, that a licensee or the NRC must be able to demonstrate how a plant conforms with or deviates from each of the draft GDC. See *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), DD-05-2, 62 NRC 389 (2005). In denying that petition, the Director of NRR stated as follows:

The GDC are referenced in 10 C.F.R. § 50.34(a), which specifies information to be submitted for a construction permit. The NRC evaluated each plant against the draft GDC or final GDC as applicable during initial licensing. A prerequisite to the issuance of the operating license was the finding that the facility will operate in conformity with the rules and regulations of the Commission and will not endanger the health and safety of the public. The safety review process, by which changes to a plant and its operating procedures subsequent to initial licensing are evaluated per the criteria of 10 C.F.R. § 50.59, provides an adequate basis for concluding that the plant continues to meet the licensing bases. This philosophy was established when the Commission decided not to apply Appendix A (the final GDC) to plants with construction permits issued prior to May 21, 1971. In a Staff Requirements Memorandum dated September 18, 1992, the Commission approved the option of not applying the final GDC to these plants and not requiring such plants to seek exemptions from the GDC. The Commission noted that the regulatory standard for such plants is plant-specific and is documented in the license, the licensing safety evaluation report, and the FSAR. As stated in SECY-92-223, "Existing regulatory processes are sufficiently broad and rigorous to ensure that plants continue to be safe and to comply with the intent of the GDC."

Id. at 396.

The Director's response is applicable to the New York AG Contention 3. Thus, the Commission has determined that meeting the intent of the GDC is accomplished through existing regulatory processes. The Commission already concluded that differences between proposed and codified design criteria was not a concern for operating plants. Whether or not a plant was issued a construction permit based on plant-specific criteria or final criteria presents no issue in a license renewal proceeding. See *Id.*

To the extent that the New York AG has alleged that the UFSAR is inaccurate due to paraphrasing plant design criteria, any such alleged errors are current compliance issues, not

subject to review under license renewal. See Staff Response to New York AG Contention 2 above.⁴⁰

New York AG Contention 4

The Environmental Report fails to comply with the provisions of 10 C.F.R. § 51.53(C)(1) because it fails to provide a separate "environmental report" for each license for which an extension is sought.

NYAG Petition at 77. In support of this contention, New York observes that the regulations in 10 C.F.R. § 51.53(c)(1) require "each applicant" for renewal of "a nuclear power plant" license to submit with its application an Environmental Report – and New York argues that this requires that a separate environmental report be submitted for each reactor. NYAG Petition at 77. Further, New York asserts that the submission of a single ER "severely distorts the environmental analysis," especially with respect to its consideration of alternatives and the denial of a portion of the application insofar as it pertains to one (rather than both) of the two reactor licenses. *Id.* at 78-79.

Staff Response to New York AG Contention 4

The Staff opposes the admission of this contention. New York fails to provide any legal support for its proposed interpretation of § 51.53(c)(1), in asserting that it requires the submission of separate environmental reports for each reactor that is included in a license renewal application, nor can any support for that interpretation be found. Rather, an applicant is required to submit with its application an environmental report that considers the environmental impacts of the "proposed action" and alternatives thereto; the "proposed action," as set forth in a license renewal application, defines the proper scope of the environmental report that is

⁴⁰ Regarding GDC 47 and GDC 50, these concerns are addressed in more detail in the Staff's Response to NYAG Contention 19.

submitted in support of that application. See 10 C.F.R. §§ 51.45(b), 51.53(c)(2). Where, as here, an applicant seeks the renewal of the licenses for two reactors at a single site, that proposed action, as set forth in the application, defines the proper scope of the environmental report. New York's allegation that Units 1 and 2 have been owned by different entities in the past, are of different designs, and have different operating histories, NYAG Petition at 77, does not mandate that separate environmental reports be submitted for each reactor. Rather, the adequacy of the Applicant's consideration of admissible environmental impacts and alternatives is a matter that may be addressed in the proceeding, to the extent raised in other environmental contentions. The Applicant's determination to submit a single application and environmental report for Units 2 and 3 does not state an admissible contention.

New York AG Contention 5

The aging management plan contained in the license renewal application violates 10 C.F.R. §§ 54.21 and 54.29(a) because it does not provide adequate inspection and monitoring for corrosion or leaks in all buried systems, structures, and components that may convey or contain radioactively-contaminated water or other fluids and/or may be important for plant safety.

NYAG Petition at 80. The New York AG asserts that Entergy's LRA is "inadequate because (1) it does not provide for adequate inspection of all systems, structures, and components that may contain or convey water, radioactively-contaminated water, and/or other fluids; (2) there is no adequate leak prevention program designed to replace such systems, structures, and components before leaks occur; and (3) there is no adequate monitoring to determine if and when leakage from these systems, structures, and components occurs." *Id.* New York claims this is equally applicable to Indian Point Unit 1, as well as to Units 2 and 3. *Id.*

Staff Response to New York AG Contention 5

The Staff opposes the admission of this contention. Here New York does not allege any specific deficiency in the Applicant's aging management program; instead it raised an issue

pertaining to current operations. In addressing a similar contention in the ongoing Pilgrim relicensing hearing, the Licensing Board recently stated, "As we have said on numerous occasions, monitoring is not proper subject matter for license extension contentions." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-08-___, 67 NRC ___, ___ (Jan. 11, 2008) (slip op.). The adequacy of Indian Point's monitoring of its buried pipes and tanks is a current operating issue and, as such, is addressed in its CLB. As such, it will continue and become a part of the terms of any renewed license, whereby as part of the regulatory process, the Applicant must provide reasonable assurance of the adequacy of, and compliance with, the CLB. See 10 C.F.R. § 54.33; 1995 Statement of Consideration, 60 Fed. Reg. at 22,461, 22,473. Although a plant's CLB will be reviewed during the course of license renewal, only those structures, systems, and components subject to aging management review are within the scope of license renewal. *Id.* at 22,473-74. Further, "a finding of compliance of a plant with its [CLB] is not required for issuance of a renewed license." 1991 Statement of Consideration, 56 Fed. Reg. at 64,951. Finally, the Licensing Board and Commission have determined that intervenors may not challenge a plant's CLB because "such issues: (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."). Therefore, the portion of this proposed contention having to do with monitoring to determine leakage is not within the scope of this proceeding.

With respect to inspections, New York's asserted position is overbroad and fails to set forth with particularity the issue sought to be raised. See 10 C.F.R. § 2.309(f)(1). New York's 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). New York fails 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, the State refers to "all systems, structures, and components that may contain or convey water, radioactively-contaminated water, and/or other fluids." See *id.*; *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004). New York attempts to narrow this contention by later referring to "each system, structure, and component within the scope of Part 54," NYAG Petition at 81, and then mentions nine systems and a concrete transfer canal; however, New York provided no rationale or focus to connect these references, and there is therefore no way to understand and address the contention.

Additionally, New York's reliance on vague or generalized studies and unsubstantiated assertions without specifying how they apply to Indian Point's LRA fails to demonstrate that there are material issues of fact in dispute. See 10 C.F.R. § 2.309(f)(1)(vi). For example, New York refers to the generic "Bathtub Curve," which was meant to describe general failure rates over the life of living and non-living things. NYAG Petition at 88-89. This graph does not specifically describe nuclear power plants, let alone buried pipes and tanks or Indian Point specifically. As such, it provides no basis to any contention that the aging management program regarding leak detection in buried pipes and tanks at Indian Point is inadequate. Also, New York points to "reports" that leaks can result in radioactive contamination of groundwater that affects human health. NYAG Petition at 83. Again, this assertion provides nothing beyond the mere mention of "reports;" there is no indication which reports, or specific parts of reports, New York relies on for this assertion.

Also, New York's asserted bases for proposed Contention 5 lack sufficient facts. See 10 C.F.R. § 2.309(f)(1)(v). New York impermissibly relies on generalized allegations and vague references to alleged events at other plants and equally unparticularized portions of general studies to provide a factual basis. See *id.*; *Dominion Nuclear Connecticut* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 363 (2001). For instance, New York refers generically to "[r]ecent events around the United States and the world – as well as at Indian Point Nuclear Power Station" as evidence that leaks and corrosion have occurred and will occur in the future. NYAG Petition at 82. Although New York goes on to list several events at nuclear power plants across the U.S., it never describes why or how specifically these events relate to Indian Point. See NYAG Petition at 84-86. New York merely asserts that because leaks have occurred at other plants, they can occur, and may occur at Indian Point. Further, in discussing the "events" at Indian Point, New York fails to point to leakage from buried pipes and tanks that are within the scope of the AMPs, but instead points to possible spent fuel pool leaks and other events that may or may not be related to structures, systems and components covered by an AMP, regardless of where they came from. NYAG Petition at 86-89. Finally, New York's expert provides no basis aside from his personal assumptions to support assertions that 10-year inspections are insufficient. NYAG Exhibits 1 of 2, Hausler Declaration. Even if corrosion is occurring, as Petitioner's expert claims, contentions that merely state that leaks can happen based upon speculation that the AMPs for buried pipes and tanks do not provide adequate inspections to detect them, without showing how or why the AMP is deficient, do not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

Finally, New York fails to address the inspections and monitoring that already take place, and will continue to take place during the period of extended operation. The Applicant has an existing Inservice Inspection program that complies with ASME requirements, that "include periodic visual, surface, and volumetric examination and leakage tests of Class 1, 2, 3, and MC

supports for license renewal.” LRA, ¶ B.1.18, B-63. Further, contrary to assertions made by the State and its expert, NYAG Petition at 80, 83-84, 91-92, the Applicant does employ preventive measures and internal inspections. The Periodic Surveillance and Preventive Maintenance program, LRA, ¶ B.1.29, B-96, Service Water Integrity program, LRA, ¶ B.1.34, B-115, Water Chemistry Control – Auxiliary Systems, LRA, ¶ B.1.39, B-129, and Water Chemistry Control – Primary and Secondary, LRA, ¶ B.1.41, B-137, are existing programs that provide for preventative measures and internal inspections. Further, the Selective Leaching program, LRA, ¶ B.1.33, B-113, is a new program that also provides for both of those elements.

In sum, while New York claims that the LRA’s 10-year inspection interval, with opportunistic inspections when warranted, does not provide adequate assurance that leaks will be detected and stopped, it fails to point to specific deficiencies in the LRA to support this assertion. Further, the Applicant already has existing programs that sufficiently address inspections and preventive measures, and it has included various measures in its LRA which the State fails to address. General allegations that an LRA is inadequate or unacceptable without the specificity or facts needed to support the assertion do not satisfy the contention admissibility requirements. Therefore, New York AG Contention 5 is inadmissible.

New York AG Contention 6

The License Renewal Application For IP2 And IP3 Fails To Comply With The Requirements Of 10 C.F.R. §§ 54.21(a) And 54.29 Because Applicant Has Not Proposed A Specific Plan For Aging Management Of Non-Environmentally-Qualified Inaccessible Medium-Voltage Cables And Wiring For Which Such Aging Management Is Required.

NYAG Petition at 92. In support of Contention 6, New York states that the LRA fails to identify the location and extent of Non-EQ Inaccessible Medium-Voltage Cables in use at IP2 or IP3, fails to provide access to referenced documents that are not publicly available (e.g., EPRI TR-103834-P1-2 and EPRI TR-109619), and fails to provide a copy of its “Non-EQ Insulated Cables

And Connections Program.” *Id.* at 93-94. Further, New York states that the Applicant has failed to address specific recommendations in a Sandia report, *Id.* at 94; and that there is no technical basis to support life extension using the existing medium voltage power cables without an aging management plan, or to support differences between aging management programs for accessible cables and inaccessible cables. *Id.* The State further alleges that the application is vague, *Id.* (*citing* LRA B.1.23), and that NUREG/CR-5643 has recommendations for detecting degradation of cables which were not included in the LRA. *Id.* In addition, the State claims that the documents provided as part of the LRA do not show which cables are addressed by the AMP, *Id.*; that not all inaccessible cables are capable of inspection via manholes, *Id.* at 95; that measures described in NUREG-1801, Vol. 2, Rev. 1, for medium voltage cables are not in Entergy's LRA, *Id.* at 99-100; that the LRA fails to commit to recommendations for aging management that appeared in various reports, *Id.* at 95-96; that measures discussed in NRC Generic Letter 2007-01, are not included in the IP2 Non-EQ Inaccessible Medium-Voltage Cables AMP, *Id.* at 97-98; and that the LRA does not address statements in NUREG-1801, that in-scope, medium-voltage cables exposed to significant moisture and significant voltage are to be tested to provide an indication of the condition of the conductor insulation. *Id.* at 99-100 (*citing* NUREG-1801 at XI E-7).

Staff Response to New York AG Contention 6

The Staff opposes the admission of New York AG Contention 6, in that it incorrectly asserts that information was omitted from the LRA, and thus fails to show the existence of a genuine dispute of material fact 10 C.F.R. § 2.309(f)(1)(vi).

To the extent that New York challenges the LRA because a specific AMP was not included, it fails to recognize that an applicant may satisfy 10 C.F.R. § 54.21(a)(3) by committing

to develop a program that meets NUREG -1801. -- and the LRA explicitly makes this commitment.⁴¹ Because the actual AMP has not been submitted, any statements about what it will or will not contain must be based on the description of the program in the LRA. To do otherwise would be to engage in speculation, which is insufficient to create an admissible contention. See, e.g. "Memorandum and Order (Denying the Village of Buchanan's Hearing Request and Petition to Intervene)" dated December 5, 2007, at 7 and cases cited therein.

Further, New York incorrectly alleges that the Indian Pont program for non-EQ inaccessible medium voltage cables did not describe a program other than inclusion of a brief paragraph. See NYAG Petition at 94 (*citing* LRA B.1.23). In fact, LRA section B.1.23 states that the "Non-EQ Inaccessible Medium-Voltage Cable Program" will be consistent with the program attributes described in NUREG-1801, Section XI.E3, "Inaccessible Medium-Voltage Cables Not Subject To 10 C.F.R. 50.49 Environmental Qualification Requirements." LRA at B-81. Further, the LRA states that no exceptions to NUREG-1801 will be taken; that industry and plant-specific operating experience will be considered; that IPEC plant-specific operating experience is consistent with the operating experience in the NUREG-1801 program description; and that this program will be implemented prior to the period of extended operation. *Id.* These statements provide far more information than is alleged by New York; further, final programs need not exist at the time of the renewal application in order to meet the requirements of 10 C.F.R. §§ 54.19 - 54.23.

New York has confused two separate new programs in its effort to support the proffered contention. Its claim that the Applicant failed to provide its "Non-EQ Insulated Cables And

⁴¹ The LRA states, "The Non-EQ Inaccessible Medium-Voltage Cable Program will be consistent with the program attributes described in NUREG-1801, Section XI.E3, Inaccessible Medium-Voltage Cables Not Subject To 10 C.F.R. 50.49 Environmental Qualification Requirements." LRA at B-81.

Connections Program" (NYAG Petition at 94) provides no support to Contention 6, because the contention concerns a different program. Nonetheless, the Staff notes that the LRA does describe the "Non-EQ Insulated Cables and Connections Program." See LRA section B.1.25 at B-85 to B-86. The LRA states that the new program will be consistent with the program described in NUREG-1801, Section XI.E1, "Electrical Cables and Connections Not Subject to 10 C.F.R. 50.49 Environmental Qualification Requirements," and that the Applicant will implement the program prior to the period of extended operation. *Id.* at B-85.

New York has generally alleged that the AMP is inadequate because it does not have additional measures described in NUREG 1801 and documents referenced therein. However, this assertion fails to support the contention, because it is incorrect: The Applicant has stated that its program will be consistent with NUREG-1801. New York has not identified any reason to believe the program will not be consistent with NUREG-1801. For example, the GALL report says, "In this aging management program periodic actions are taken to prevent cables from being exposed to significant moisture . . . *as needed.*" See NYAG Petition at 99 (*citing* NUREG 1801 at XI E-7) (emphasis added); the New York then states that for IP2 these measures are not specifically included. *Id.* at 100. However, New York has failed to provide any basis to support a claim that the new program, which the application states will be consistent with NUREG-1801, will fail to take actions "as needed," nor has New York specified which systems do not have "as needed" actions being taken. The bare assertion and speculation that a program will not follow NUREG-1801, contrary to the plain words of the LRA, is insufficient to support admission of a contention. See "Memorandum and Order (Denying the Village of Buchanan's Hearing Request and Petition to Intervene)" dated December 5, 2007, at 7 and cases cited therein.

Similarly New York's assertion that measures in GL 2007-01 are not included in the IP2 AMP, lacks factual basis.⁴² Thus, the application stated that operating experience would be considered. LRA at B-81. The New York AG has not explained why it believes GL 2007-01 would be excluded from the final program by, for instance, by reviewing the actual operating experience regarding cable failure.⁴³

In sum, NYAG Contention 6 fails to show a genuine dispute with the Applicant, and thus fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi).

New York AG Contention 7

The license renewal application for IP2 and IP3 fails to comply with the requirements of 10 C.F.R. §§ 54.21(a) and 54.29 because applicant has not proposed a specific plan for aging management of non-environmentally qualified inaccessible low-voltage cables and wiring for which such aging management is required.

NYAG Petition at 100. In support of Contention 7, the New York AG states that pursuant to 10 C.F.R. § 54.21, the LRA must list those systems and components subject to an aging management review, and describe and justify the methods used. NYAG Petition at 100. New York asserts that the LRA fails to discuss an AMP for low-voltage cables (less than 2 kV), and fails to discuss how the methods used excluded low-voltage cables, *Id.* at 101; further, it asserts

⁴² The Applicant has responded to GL 2007-01. See letter from Fred Dacimo, to NRC, "Submittal of Indian Point Response to Generic Letter 2007-01," May 7, 2007 (ADAMS Accession No. ML071350410). The response included a history of inaccessible or underground power cable failures for all cables that are within the scope of 10 C.F.R. § 50.65 (the Maintenance Rule) (there were two), and a description of inspection, testing and monitoring programs to detect the degradation of inaccessible or underground power cables that support EDGs, offsite power, ESW, service water, component cooling water and other systems that are within the scope of 10 C.F.R. § 50.65. *Id.*

⁴³ Regarding the concerns of the NYAG for access to non-public documents (*e.g.* EPRI documents), these concerns do not state a genuine dispute of material fact, and do not amount to an admissible contention. Contentions must be based on information available at the time the contention was filed, subject to supplementation or amendment if new information becomes available later. 10 C.F.R. § 2.309(f)(2).

that there are numerous inaccessible cables, ranging in voltage from 100 to 2,000 volts, installed at IP2 and IP3 that meet the requirements described in 10 C.F.R. § 54.4 (e.g. power and control for auxiliary component cooling pumps, safety injection pumps, and RHR pumps). *Id.* New York contends that the LRA has not specifically identified the locations of the Non-EQ Inaccessible Low-Voltage Cables, *Id.*; that the LRA does not satisfy the Nuclear Energy Plant Optimization (“NEPO”) Final Report on Aging and Condition Monitoring of Low-Voltage Cable Materials, or a Sandia report which confirmed that some low-voltage cables are capable of substantial aging as a result of heat, radiation and other environmental factors present in the reactor. *Id.* at 102, 103. In sum, New York contends that the LRA fails to explain or justify its failure to provide an AMP for low-voltage cables. *Id.* at 103.

Staff Response to New York AG Contention 7

The Staff opposes the admission of NYAG Contention 7, because it fails to identify an omission from the application, and fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi). Contrary to the State’s assertion, neither 10 C.F.R. § 54.21(a) nor § 54.29 require an applicant to propose a specific plan for inaccessible low-voltage non-EQ cables. Furthermore, the program in the LRA does address inaccessible low voltage non-EQ cables, as part of its AMP for non-EQ cables. In this regard, the LRA includes a Non-EQ Insulated Cables and Connections Program, which the Applicant states will be consistent with the program described in NUREG-1801, Section XI.E1, Electrical Cables and Connections Not Subject to 10 C.F.R. 50.49 Environmental Qualification Requirements. LRA at B-85. Under a program that is consistent with GALL, a representative sample of accessible insulated cables and connections is to be inspected, and if an unacceptable condition or situation is identified, an applicant must decide whether the same condition or situation is applicable to other accessible or inaccessible cables or connections. NUREG-1801, Rev. 1 at XI E-1. Therefore, New York’s assertions must be rejected for failing to address the relevant portion of the LRA.

Further, in the Standard Review Plan for license renewal, the Staff assessed electrical cables for instruments not subject to 10 C.F.R. 50.49 EQ requirements, and determined that the AMP for “Electrical Cables And Connections Used In Instrumentation Circuits Not Subject To 10 C.F.R. 50.49 EQ Requirements” was adequate, and no further analysis was needed. NUREG-1800, Rev. 1, at 3.6-7. The SRP-LR and the GALL Report do not address a separate program for inaccessible low voltage cables, in contrast to the explicit recommendation of documenting a program for inaccessible, medium voltage cables. *Id.* Accordingly, an application is not deficient for failing to discuss an additional AMP that is specific to inaccessible, non-EQ low voltage cables.

In sum, NYAG Contention 7 is not admissible because the application addresses inaccessible cables though the broader AMP for non-EQ cables. See LRA at B-85; NUREG-1801, Section XI.E1. Further, the State has not shown any requirement for a special and separate program for non-EQ inaccessible low voltage cables. The Contention therefore fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

New York AG Contention 8

The LRA for IP2 and IP3 violates 10 C.F.R. §§ 54.21(a) and 54.29 because it fails to include an aging management plan for each electrical transformer whose proper function is important for plant safety.

NYAG Petition at 103. In support of Contention 8, New York states that there are numerous Electrical Transformers that perform a function described in §§ 54.4(a)(1)/(2) and (3). It cites Appendix A, Page A-35 of the UFSAR supplement which describes a Structures Monitoring Program that includes a program for monitoring “transformer/switchyard support structures”, and asserts there is no AMP for transformers within the scope of 10 C.F.R. § 54.21(a)(1)(i). *Id.* at 104. The State further cites Attachment 2 of the LRA (p.2.4-22) , which discusses the need for an AMP for “transformer support structures” based on the criterion of 10 C.F.R. § 54.4(a)(3), *Id.*;

and it cites a draft RAI in which the Staff identified some transformers for which an AMP should be provided, which are not included in the LRA. *Id.* at 105 (*citing* the Staff's September 21, 2007 RAIs, at 10).

Staff Response to New York AG Contention 8

The Staff opposes the admission of NYAG Contention 8, because 10 C.F.R. § 54.21(a)(1)(i) does not require an aging management review for transformers. Structures and components explicitly excluded from an aging management review include switchgears, transistors, batteries, power inverters, battery chargers, and power supplies. 10 C.F.R. § 54.21(a)(1)(i). Further, the list of items excluded is not limited to those structures and components listed in § 54.21(a)(1)(i). *Id.*

In this regard, the Staff's Standard Review Plan concluded that transformers (*e.g.*, instrument transformers, load center transformers, small distribution transformers, large power transformers, isolation transformers, coupling capacitor voltage transformers) do not require a review under § 54.21(a)(1)(i). NUREG-1800, Rev. 1, at 2.1-23. As documented in the SRP-LR, the Staff interprets § 54.21(a)(1)(i) as excluding transformers, just as it excludes other power-supply-related structures and components.

Regarding the draft RAI, it appears that the New York AG did not understand the actual question that was proposed by the Staff. Contrary to the State's assertion, the Staff did not identify "some transformers for which AMP should be provided but which are not included in the LRA." NYAG Petition at 105. Instead, the portion of the RAI quoted by the NYAG stated that transformers for offsite power are typically in scope, and then said that long-lived passive structures are subject to an aging management review ("AMR"), not an AMP. *Id.* As previously discussed, transformers do not require an AMR nor AMP. The NYAG apparently confused the

AMP with an AMR.⁴⁴ Further, the NYAG quoted only part of the draft RAI. The remainder of the draft RAI shows that the Staff did not imply or assert that an AMP for a transformer was needed.⁴⁵ The Draft RAI does not ask whether an AMR is required for "each electrical transformer whose proper function is important for plant safety" (the subject of Contention 8), but instead sought information on what components in the switchyard connect a transformer to the offsite power system. The NYAG misunderstood the information sought in the draft RAI, and its assertions fail to support its contention.

New York AG Contention 9

The Environmental Report (§§ 7.3 and 7.5) fails to evaluate energy conservation as an alternative that could displace the energy production of one or both of the Indian Point reactors and thus fails to carry out its obligations under 10 C.F.R. § 51.53(c)(2).

⁴⁴ 10 C.F.R. § 54.21(a)(3) requires that an LRA must demonstrate, for systems, structures, and components (SSCs) identified in the scope of license renewal and subject to an AMR pursuant to 10 C.F.R. § 54.21(a)(1), that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the current licensing basis (CLB) for the period of extended operation. This AMR consists of identifying the material, environment, aging effects, and the AMP(s) credited for managing the aging effects. NUREG-1800, Rev. 1 at 3.0-1

⁴⁵ The draft RAI went on to say:

According to the above, both paths, from the safety-related 480 Volt (V) buses to the first circuit breaker from the offsite line, used to control the offsite circuits to the plant should be age managed. The guidance does not specify that the switchyard is not part of the plant system nor that the switchyard does not need to be included in the scope of license renewal. Explain in detail which high voltage breakers and other components in the switchyard will be connected from the startup transformers up to the offsite power system for the purpose of SBO recovery.

Summary Of Telephone Conference Call Held On September 21, 2007, Between The U.S. Nuclear Regulatory Commission And Entergy Nuclear Operations, Inc., Concerning Draft Requests For Additional Information Pertaining To The Indian Point Nuclear Generating Unit Nos. 2 And 3, License Renewal Application, (Oct. 16, 2007) (ADAMS Accession No. ML072770605) at 10.

NYAG Petition at 106. New York argues that the ER lacks a cost-benefit analysis for energy alternatives, and that it “ignores the clear mandate of the GEIS” to analyze energy conservation alternatives. *Id.* New York also argues that the ER “unreasonably limits” the alternatives to license renewal which should be considered. *Id.*

Staff Response to New York AG Contention 9

The Staff opposes the admission of this contention, because energy conservation is outside the scope of required NEPA analysis.

In the ER, Entergy cites Section 1.3 of the GEIS in observing that “[t]he purpose and need for the proposed action (renewal of an operating license) is to provide an option that allows for power generation capability beyond the term of a current nuclear power plant operating license to meet future system generating needs.” ER § 1.0. Furthermore, the GEIS, as cited in the ER, clearly states that “a reasonable set of alternatives should be limited to analysis of *single, discrete electric generation sources* and only electric generation sources that are technically feasible and commercially viable.” GEIS, § 8.1 (emphasis added). Thus, the GEIS establishes that conservation need not be examined in detail in an ER for license renewal.

Further, the Commission has held that NEPA does not require an analysis of conservation as an alternative, in a proceeding for an early site permit. Thus, in *Exelon Generation Co., L.L.C.* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 805, 807 (2005), *aff’g* LBP-05-19, 62 NRC 134, (2005), the Commission stated that energy efficiency is “not a reasonable alternative that would advance the goals” of a nuclear energy project, because the applicant’s business is “the generation of electricity and the sale of energy and capacity.” *Id.* at 806. For this reason, the Commission concluded that “the NEPA ‘rule of reason’ does not demand an analysis of . . . energy efficiency.” *Id.* at 807. Energy efficiency and conservation are beyond the ability of the Applicant to implement, and are therefore outside the scope of the required NEPA analysis of reasonable alternatives.

Analysis of energy efficiency and conservation as alternatives is beyond the scope of what is required under NEPA. Therefore, New York AG Contention 9 should be rejected.

New York AG Contention 10

In violation of the requirements of 10 C.F.R. § 51.53(c)(3)(iii) and of the GEIS § 8.1, the ER (§ 8.3) treats all alternatives to License Renewal except natural gas or coal plants as unreasonable and provides no substantial analysis of the potential for other alternatives in the New York energy market.

NY Petition at 120. New York bases its contention on the argument that the ER includes only a “cursory analysis” of the feasibility of various energy alternatives, including several forms of renewable energy. *Id.* at 121. New York states that the GEIS requires all alternatives to be fully evaluated to license renewal, and that the ER incorrectly relies on the GEIS to draw conclusions pertaining to energy alternatives. *Id.* The State relies on a renewable energy portfolio to support its assertion that Entergy’s analysis is insufficient. *Id.* at 123. New York also argues that a reference made to “need for power” in the ER violates 10 C.F.R. § 51.56(c)(2) and the GEIS. *Id.* at 121.

Staff Response to New York AG Contention 10

The Staff does not oppose admission of this contention to the extent that it challenges the adequacy of the analysis of renewable energy alternatives provided in Section 8 of the ER. See ER at 7-4 – 7-5. However, the Staff opposes the admission of any assertion that the ER should consider “demand-side” alternatives such as energy efficiency and conservation, on the grounds that such an assertion fails to raise an issue of law or fact material to the determination the NRC must make in this proceeding and fails to state a genuine dispute of material fact. See 10 C.F. R. § 2.309(f)(1)(i) and (vi). In this regard, New York argues that the ER fails to consider energy alternatives including “repowering existing power plants to . . . increase their power output,” “enhancing existing transmission lines,” and “energy efficiency and conservation.” NY

Petition at 122. These proffered alternatives are demand-side alternatives or are otherwise beyond the ability of the Applicant to implement. Therefore, as discussed in the Staff's response to New York AG Contention 9, these alternatives are not material to the determination the NRC must make, fail to state a genuine dispute of material fact, and should be rejected.

New York AG Contention 11

Contrary to the requirements of NEPA and 10 C.F.R. Part 51, the ER fails to fully consider the adverse environmental impact that will be created by leaving IP2 and/or IP3 as an energy option beyond 2013 and 2015.

NYAG Petition at 138. In support of this contention, New York argues that it has identified other energy options to replace the power produced by Indian Point Units 2 and 3, but that "as long as IP2 and/or IP3 remain as options," there will be a decreased incentive for those other energy options to be pursued. *Id.* New York then cites its Contentions 9 and 10, in which it alleges that the ER fails to give adequate consideration to conservation and energy alternatives. *Id.* at 139.

Staff Response to New York AG Contention 11

The Staff opposes the admission of this contention. Rather than argue here that the ER is deficient for failing to consider conservation and alternative energy sources (as the State alleges in Contentions 9 and 10), this contention essentially argues that the Applicant is required to consider the disincentives to development of alternative energy sources that is caused by its continued operation of Indian Point Units 2 and 3. In other words, here the State would require the Applicant to consider not whether alternatives might exist, but whether its operation of the facility would lead other decision-makers to put aside other energy options. The State does not allege that this is an "environmental impact" of license renewal, nor does it provide any legal basis to support a claim that NEPA requires consideration of "disincentives" rather than the consideration of alternatives. Further, the State fails to provide factual support for its assertion that alternative energy options will not be pursued as long as Indian Point

continues to operate, nor does it show that such options could not be pursued even if the Indian Point licenses are renewed. The contention should be rejected for failing to state an adequate basis and seeking to raise an issue which is not concrete or litigable.

New York AG Contention 12

Entergy's Severe Accident Mitigation Alternatives (SAMA) for Indian Point 2 and Indian Point 3 does not accurately reflect decontamination and clean up costs associated with a severe accident in the New York metropolitan area and, therefore, Entergy's SAMA analysis underestimates the cost of a severe accident in violation of 10 C.F.R § 51.53(c0(3)(ii)(L).

NYAG Petition at 140. New York faults Entergy's use of the MELCOR Accident Consequence Code System (MACCS2), asserting that it erroneously relies on an assumption that the dispersion resulting from an accident would consist of large-sized radionuclide particles. Instead, New York asserts, the dispersion would consist of smaller particles, which would require more expensive and difficult clean-up and decontamination efforts. *Id.* at 140-141. The use of MACCS2, New York asserts, results in an underestimation of the cost of clean-up and decontamination. *Id.* at 141. New York argues that Entergy should not have used the decontamination cost figure contained in the MACCS Code and should have used the analytical framework contained in a 1996 Sandia National Laboratories report concerning site restoration costs. *Id.* at 146. In support of this contention, New York cites the Sandia Report and two other publicly available reports. *Id.* at 142-145. It does not, however, proffer any affidavit or expert opinion in support of this contention.

Staff Response to New York AG Contention 12

The Staff opposes the admission of NYAG Contention 12. NYAG Contention 12 lacks basis because it fails to establish the relevance of the report on which it relies. As the State observes, the Sandia Report discusses "a scenario in which plutonium from a nuclear weapon is dispersed as a result of an accident resulting from a fire or non-nuclear detonation of the

weapon's explosive trigger." *Id.* at 143. The release at issue in this proceeding is the release of radionuclides associated with a severe accident at a nuclear power plant. These are, on their face, two different events. New York has not demonstrated a nexus between the analysis in the Sandia Report and a severe accident at a nuclear power plant. It has not explained why the analysis for the costs associated with a release involving a nuclear warhead should be considered in the calculation of costs associated with a nuclear power plant accident.

In addition, New York's preference for the Sandia Report's approach is not sufficient to establish admissibility. Its proffer of the Sandia Report's approach amounts to a challenge to the MACCS2 Code. But such a challenge must include a basis. New York must show how the Sandia Report is superior or how the MACCS2 Code is defective. *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), LBP-03-17, 58 NRC 221, 240 (2003). That is something New York has failed to do. New York states that the Sandia Report "recognized that earlier estimates (such as those incorporated within the MACCS codes) of decontamination costs are incorrect because they examined fallout from the nuclear explosion of nuclear weapons that produce large particles and high mass loadings." NY Petition at 143. But the Sandia Report does not identify the MACCS2 Code as one of those "earlier estimates," and New York has not identified the "earlier estimates" that it claims were "incorporated within the MACCS codes." Nor does New York show the relevance of nuclear weapons detonations to an accident at an NRC-licensed reactor. Thus, New York has not established a basis for this contention.

Finally, while New York states that two recent studies "provide additional information concerning the appropriate cost inputs for evacuation, temporary housing, decontamination, replacement, and disposal activities," *id.* at 145, it does not identify any MACCS2 Code inputs as deficient. New York stops far short of explaining why the inputs that it cites should be used in

lieu of the MACCS2 inputs. New York's brief, conclusory statement does not provide a sufficient basis for the contention.

New York AG Contention 13

The ER SAMA analysis for IP3 is deficient because it does not include the increased risk of a fire barrier failure and the loss of both cable trains of important safety equipment in evaluating a severe accident.

NYAG Petition at 146. New York contends that Entergy's SAMA analysis does not compare the costs of the consequences of the loss of both cable trains against the cost of mitigating an accident by upgrading the relevant cable and equipment enclosures to meet the requirements of Section G.2 of Appendix R. *Id.* New York also asserts that, contrary to statements in the SAMA, fire hazard has not been conservatively modeled. *Id.* at 147. Finally, the petition asserts that the SAMA analysis failed to consider the effect of the introduction of transient combustible materials by terrorists. *Id.* at 147-48. New York proffers no experts in support of this contention.

Staff Response to New York AG Contention 13

The Staff opposes the admission of NYAG Contention 13 in that it fails to establish a material issue of fact, and is unsupported and speculative. Further, to the extent that it raises issues related to the current licensing basis or a terrorist attack, it raises issues outside of the scope of license renewal.

In this contention, New York fails to link the alleged deficiency (*i.e.*, conditions resulting from the grant of the fire barrier exemption), to any material issue of fact. Specifically, New York has not shown that consideration of these conditions will result in a material change in the SAMA analysis. It presumes that failure to specifically address the fire barrier conditions 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, New York has not demonstrated that, if the fire barrier conditions were included in the SAMA analysis, the inclusion would result in a change in the conclusions of the SAMA analysis, *i.e.*, the identification of additional cost-beneficial SAMA candidates.

In support of its contention, New York cites NRC regulations regarding fire protection, the *Federal Register* notice regarding the fire barrier exemption, and a Safety Evaluation issued in connection with the NRC's efforts to improve the capabilities of nuclear power plants to respond to terrorist threats. None of these documents show how the conditions associated with the fire barrier exemption should figure into the SAMA analysis, and none of them establish the materiality of the contention.

Finally, the contention is inadmissible to the extent it raises issues that are beyond the scope of this proceeding. The fire barrier exemption is part of the current licensing basis. As explained *infra* in response to New York AG Contention 20, challenges to the current licensing basis are beyond the scope of this proceeding. Similarly, the portion of this contention regarding a terrorist attack on the facility is beyond the scope of this proceeding. See Staff Response to Clearwater Contention EC-6, *infra.*, which is hereby incorporated by reference herein. Further, the contention assumes that a terrorist attack on the facility will have certain characteristics, which is wholly speculative. See *GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station)*, CLI-00-6, 51 NRC 193, 208 (2000).

For the foregoing reasons, New York AG Contention 13 is inadmissible.

New York AG Contention 14

The license renewal application and SAMA analysis are incomplete and insufficiently analyze alternatives for mitigation of severe accidents, in that they (a) fail to include more recent information regarding the type, frequency, and severity of potential earthquakes and (b) fail to include an analysis of severe accident mitigation alternatives that could reduce the effects of an earthquake damaging IP1 and its systems, structures, and

components that support IP2 and IP3 all in violation of 10 C.F.R. § 51.53(c)(3)(ii)(L).

NYAG Petition at 149. In support of this contention, New York proffered the declarations of Lynn R. Sykes and Leonardo Seeburg of the Lamont Doherty Earth Observatory of Columbia University.

Staff Response to New York AG Contention 14

The Staff opposes the admission of this contention on the grounds that it does not demonstrate the existence of a material issue in dispute and because it lacks specificity and misapprehends how the probability risk assessment (“PRA”) is performed.

While New York asserts that new information regarding seismic activity should have been included in the SAMA analysis, it fails to assert that inclusion of the new information would have changed the results of the SAMA analysis for IP2 and IP3. It has failed to link the new information to any result and thus it has not established that the issue is material to a decision in this proceeding. Moreover, while New York devotes substantial space to a discussion of the technical merits of the IP1 Decommissioning Plan, Safety Analysis Report, and Supplemental Environmental Information, it does not establish a nexus between this information and the IP2 and IP3 SAMAs.

In addition, the contention appears to be premised on a misunderstanding of the probabilistic risk assessment process and the way in which systems, structures, and components (SSCs) of different reactor units are addressed in the development of the PRA. To the extent that SSCs are interdependent in a multi-unit site, those SSCs would be included in

the PRA as a general matter.⁴⁶ New York does not identify any SSCs that it believes should have been, but were not, included in the PRA. Its contention thus lacks specificity.⁴⁷

For the foregoing reasons, New York AG Contention 14 is inadmissible.

New York AG Contention 15

The Severe Accident Mitigation Alternatives (SAMA) analysis for Indian Point 2 (ER pages 4-64 to 4-67) and Indian Point 3 (ER pages 4-68 to 4-71) are incomplete, and insufficiently analyze alternatives for mitigation of severe accidents in violation of 10 C.F.R. § 51.53(c)(3)(ii)(L).

NYAG Petition at 155. New York asserts that the SAMA analysis for IP2 and 3 does not include recent data regarding the type, frequency, and severity of potential earthquakes and does not include an analysis of severe accident mitigation alternatives that could reduce the effect of those earthquakes. *Id.* New York cites the declarations of Messrs. Sykes and Seeburg and various NRC documents in support of this contention. *Id.* at 159-162.

Staff Response to New York AG Contention 15

The Staff opposes the admission of New York AG Contention 15 as immaterial and thus inadmissible. Like New York Contention 14, this contention is immaterial because it fails to demonstrate that new information about seismic activity would change the results of the SAMA analysis. Specifically, New York has not established that the seismic activity it posits will cause a change in the SAMA analysis that will result in the identification of additional cost-beneficial

⁴⁶ American Society of Mechanical Engineers (“ASME”) RA-Sb-2005, Addenda to ASME RA-S-2002, Standard for Probabilistic Risk Assessment for Nuclear Power Plant Applications, pp. 43 and 45. There are exceptions to this general rule. For example, SSCs that are assumed to fail are, conservatively, not included in the PRA. *Id.*

⁴⁷ New York identifies the “Unit 1 superheater stack as a seismic failure constituting a dominant risk contributor, thus implying that this element should have been included in the PRA for IP2 and IP3 and that it was not.” New York Petition at 150, *citing* NUREG-1742, Vol. 2, p. 2-8. It was, in fact, included in the PRA for IP2 and IP3. See PRA, Independent Plant Examination, External Events (“IPEEE”) for IP2 at p. 3-25 and IPEEE for IP3 at p.3-43,

mitigation alternatives. As New York has not established the materiality of Contention 15, the contention is therefore inadmissible.⁴⁸

To the extent that this contention challenges the UFSAR or the IPEEE, the Staff opposes it as it raises issues covered by the current licensing basis and thus raises issues that are out of scope. See Staff Response to New York AG Contention 27.

New York AG Contention 16

Entergy's assertion in its SAMA analysis for IP2 and IP3 that it "conservatively" estimated the population dose of radiation in a severe accident, is unsupported because Entergy's air dispersion model will not accurately predict the geographic dispersion of radionuclides released in a severe accident and Entergy's SAMA will not present an accurate estimate of the costs of human exposure.

NYAG Petition at 165. New York asserts that Entergy's air dispersion model in the MACCS2 Code is not as accurate as newer models. *Id.* In support of this assertion, New York submitted the Declaration of Bruce Egan.

Staff Response to New York AG Contention 16

The Staff opposes the admission of New York AG Contention 16, in that it fails to raise a genuine material issue and is inadmissible. The gist of New York's argument is that it prefers its own air dispersion model, which yields results different from the Applicant's model. New York fails to show, however, that the MACCS2 Code used by the Applicant is deficient.

A similar challenge was raised by a petitioner in another license renewal action. In *Pilgrim*, an intervenor criticized the code and the inputs the applicant had used, alleging that the

⁴⁸ In addition, the Staff notes that New York states that the seismic spectra figures for IP3 "do not appear to be included as part of the . . . LRA." NYAG Petition at 157. This assertion fails to recognize that the seismic spectra for IP3 is provided in §3.1.2 of the IP3 IPEEE submittal. See letter from James Knobel to NRC Document Control Desk, Subject: Individual Plant Examination of External Events (IPEEE), September 26, 1997 (ADAMS Accession No. ML9710060094).

code failed to model dispersion close to the source, failed to model long range dispersion and that the user of the code could affect the outcome by manipulating inputs and parameters.

Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 324 (2006). The Board rejected the challenge to the use of the MACCS2 Code, (but accepted the contention to the extent that it challenged the specific inputs the applicant used). *Id.* at 338-341. Subsequently, the Board granted the applicant's motion for summary disposition regarding the inputs contention - - and the Board provided the following comments regarding the MACCS2 Code:

MACCS2 is the current standard for performing SAMA analysis. In this instance, MACCS2 was used to compute hundreds of scenarios which were then weighted according to their probabilities and then to develop a distribution of probabilities of the consequences and risks. . . . In our view, it is necessary for the Staff to take a uniform approach to its review of such analyses by license applicants and for performance of its own analyses, and it would be imprudent for the Staff to do otherwise without sound technical justification. Where, as here, these analyses are customarily prepared using the MACCS2 code, and where this code has been widely used and accepted as an appropriate tool in a large number of similar instances, the Staff is fully justified in finding, after due consideration of the manner in which the code has been used, that analysis using this code is an acceptable method for performance of SAMA analysis. Furthermore, a general challenge to the adequacy of this code to make these computations was mounted by Pilgrim Watch ab initio, and rejected by this Board.

Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), LBP-07-13, ___ NRC ___ (Oct. 30, 2007)(slip op. at 8-9) (citations omitted). As the Licensing Board in *McGuire and Catawba* explained in finding a similar contention inadmissible:

the intervenors have made no showing either that the models used by Duke are defective or incorrect for the purpose used or that those models were used incorrectly by Duke. Nor have the Intervenor demonstrated that the models they are recommending are superior in any way to those employed by Duke. The Intervenor merely point out that, by using their models in the manner they are recommending, a different result would be achieved. This is an insufficient basis to formulate a valid contention.

McGuire and Catawba, 58 NRC at 240.

For the same reasons, New York AG Contention 16 should be rejected.

New York AG Contention 17

The Environmental Report fails to include an analysis of adverse impacts on off-site land use of license renewal and thus erroneously concludes that relicensing of IP2 and IP3 “will have a significant positive economic impact on the communities surrounding the station” (ER Section 8.5) and understates the adverse impact on off-site land use (ER Sections 4.18.4 and 4.18.5) in violation of 10 C.F.R. Part 51, Subpart A, Appendix B.

NYAG Petition at 167. New York supports this contention by arguing that the ER analysis of land use impacts is deficient “because it ignores the positive impact on land use and land value from denial of the license extension.” *Id.* at 168. New York also argues that the ER “looks only at tax-driven and population-driven impacts,” and that it “completely ignor[es] the impact on adjacent lands of the unexpected continued operation of a nuclear generating facility.” *Id.* at 169. New York further states that “the ER fails to consider reasonable alternatives to mitigate off-site land use impact as required by 10 C.F.R. § 51.53(c)(3)(ii)(I).” *Id.* at 170. New York continues with a discussion of how local property values are impacted by the presence of a nearby electrical generating plant. *Id.* at 172-74.

Staff Response to New York AG Contention 17

The Staff opposes the admission of this contention because it fails to demonstrate that the issue raised is material to the findings the NRC must make to support license renewal. See 10 C.F.R. § 2.309(f)(1)(iv).

New York’s arguments regarding land use impacts are misplaced. Table B-1 in 10 C.F.R. Part 51 explains that offsite land use in the license renewal term is a Category 2 issue, and includes the finding that “Significant changes in land use may be associated with population and tax revenue changes resulting from license renewal.” Reg. Guide 4.2, Supp. 1,

Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses, at 4.17.2 (Sept. 2000) explains, however, that Table B-1 is ambiguously written, and that only tax revenue changes were intended to be considered Category 2 issues. See *Id.* at 4.2-S-44. Further, The GEIS clearly states:

Based on predictions for the case study plants, it is projected that all new population-driven land-use changes during the license renewal term at all nuclear plants will be small because population growth caused by license renewal will represent a much smaller percentage of the local area's total population than has operations-related growth.

NUREG-1437, § 4.7.4.2. Therefore, the only Category 2 land-use issue required for consideration is the potential for tax-driven land-use changes. Furthermore, New York is mistaken in its assertion that § 51.53(c)(3)(ii)(I) requires the Applicant to consider mitigating alternatives. That section reads in pertinent part, "An assessment of the impact of the proposed action on housing availability, land-use, and public schools (impacts from refurbishment activities only) within the vicinity of the plant must be provided." It does not require consideration of alternatives.

New York misstates the meaning of the offsite land-use analysis requirements. The points raised in this contention fail to demonstrate that the issue is material to the findings the NRC must make in this proceeding. This contention should be rejected.

New York AG Contention 18

The License Renewal Application for IP2 and IP3 fails to comply with the requirements of 10 C.F.R. § 50.71(e) because information from safety analyses and evaluations performed at the NRC's request are not identified or included in the UFSAR.

NYAG Petition at 174. In support of this contention, New York presents an extensive list of claims regarding the adequacy of the FSARs for Unit 2 and Unit 3 under 10 C.F.R. § 50.71(e), including allegations that the FSARs fail to address various NRC Bulletins and Generic Letters,

id. at 174-197, and fail to contain “all of the required safety analyses information,” *id.* at 197. According to the State, “[i]t is not possible to determine all equipment, components and systems that require aging management or whether proposed aging management programs are adequate to perform their intended function unless the UFSAR accurately reflects the status of the plant's safety equipment, components and systems.” *Id.* at 176. Further, the State asserts that “[b]ecause the UFSAR is not in compliance with 10 C.F.R. § 50.71(e), is woefully out of date, and fails to contain the detail necessary to even correctly describe and identify all of the systems for which aging management is required, Entergy is unable to provide reasonable assurance that it has a current licensing basis or that its plant is in compliance with its current licensing basis thus violating 10 C.F.R. §§ 54.3(a) and 54.29(a).” *Id.*

Staff Response to New York AG Contention 18

The Staff opposes the admission of this contention. As stated above in response to NYAG Contention 1, the adequacy of an applicant's FSAR and its compliance with the current licensing basis are matters to be considered in connection with a facility's current operating license, and are not proper subjects for consideration in a license renewal proceeding. See 1995 Statement of Consideration, 60 Fed. Reg. at 22,471, 22,473.⁴⁹ Further, the State has not identified any portion of the LRA or the Applicant's aging management programs that it contends are deficient due to any alleged deficiency in the FSARs. The contention should be rejected for failing to demonstrate that the issue raised is within the scope of the proceeding and is material to the findings the NRC must make in considering the LRA, and for failing to show

⁴⁹ The State includes in its discussion of this contention certain alleged deficiencies in the Indian Point Unit 1 FSAR. See NYAG Petition at 196-197. The State's claims regarding Unit 1 are inadmissible here, for the reasons set forth in the text above, and because the State does not show that they pertain to the LRA submitted for Units 2 and 3, and they fail to state a matter for which relief could be granted in this proceeding.

that a genuine dispute exists with regard to a material issue of law or fact, including references to any specific portion of the application that the State alleges is deficient.

New York AG Contention 19

IP2 and IP3 do not provide reasonable assurance of adequate protection for the public health and safety as required by 10 C.F.R. § 50.57(a)(3) because they are not designed to meet the legally relevant General Design Criteria and thus also violate 10 C.F.R. §§ 54.33(a), 54.35 and 50.54(h).

NYAG Petition at 198. In support of this contention, New York presents various claims regarding the General Design Criteria (“GDC”) applicable to Units 2 and 3, including assertions that Units 1 and 2 do not comply with the GDC as proposed or adopted by the Commission in 10 C.F.R. Part 50, but “at best” comply with modifications of the Draft GDC proposed by the Atomic Industrial Forum (“AIF”) in 1967; and that the AIF version of the Draft GDC resulted in *de facto* exemptions for Units 2 and 3 from applicable NRC requirements. *Id.* at 198-202. Further, the State alleges that 10 C.F.R. § 54.35 requires Indian Point Units 2 and 3 to meet “the relevant general design criteria” published by the NRC, and because Units 2 and 3 do not meet the published GDCs, they violate 10 C.F.R. §§ 54.33(a), 54.35 and 50.54(h). *Id.* at 198.

Staff Response to New York AG Contention 19

The Staff opposes the admission of this contention, for failing to state a proper legal basis and failing to state an issue that is within the scope of this proceeding. Despite the State’s ipse dixit assertion that Indian Point Units 2 and 3 are required to comply with those GDCs in 10 C.F.R. Part 50 Appendix A, the Commission has clearly stated that facilities (like Indian Point Units 2 and 3 and 62 other reactors) whose construction permits were issued prior to the effective date of the Final GDC (*i.e.*, May 21, 1971), are not required to comply with the

GDC.⁵⁰ Moreover, the Draft GDC (published in July 1967),⁵¹ by definition, were not binding requirements. Construction permit applicants like Indian Point Units 2 and 3 could elect to satisfy the Draft GDC or some other set of requirements – such as the proposed modifications to the Draft GDC, submitted by the Atomic Industrial Forum (“AIF”) on October 2, 1967.⁵² Regardless of which standards an applicant adopted, the adequacy of its design was then evaluated by the Commission on a plant-specific basis, and the Commission’s decision to issue the operating licenses for Units 2 and 3, and to allow those facilities to operate until now, reflects the Commission’s determination that operation of those facilities will not endanger public health and safety.

⁵⁰ Indian Point Unit 2 received a provisional construction permit (“CP”) in 1966; Unit 3 received a CP in 1969. In discussing the standards applicable to plants whose construction permits were issued prior to May 21, 1971, the Commission stated as follows:

At the time of promulgation of Appendix A to 10 CFR Part 50, the Commission stressed that the GDC were not new requirements and were promulgated to more clearly articulate the licensing requirements and practice in effect at that time. While compliance with the intent of the GDC is important, each plant licensed before the GDC were formally adopted was evaluated on a plant specific basis, determined to be safe, and licensed by the Commission. Furthermore, current regulatory processes are sufficient to ensure that plants continue to be safe and comply with the intent of the GDC. Backfitting the GDC would provide little or no safety benefit while requiring an extensive commitment of resources. Plants with construction permits issued prior to May 21, 1971 do not need exemptions from the GDC.

Staff Requirements Memorandum (“SRM”) dated September 18, 1992 (“Subject: SECY-92-223 – Resolution of Deviations Identified During the Systematic Evaluation Program”).

⁵¹ See Proposed Rule, “Licensing of Production and Utilization Facilities: General Design Criteria for Nuclear Power Plant Construction Permits,” 32 Fed. Reg. 10,213 (July 11, 1967).

⁵² See Letter from Edwin A. Wiggin (AIF) to Secretary, U.S. Atomic Energy Commission, dated October 2, 1967 (ADAMS Accession No. ML003674718).

Moreover, the requirements applicable to a facility's design are part of its current licensing basis, and are not subject to challenge in a license renewal proceeding. As the Commission has stated:

The CLB represents the evolving set of requirements and commitments for a specific plant that are modified as necessary over the life of a plant to ensure continuation of an adequate level of safety. The regulatory process is the means by which the Commission continually assesses the adequacy of and compliance with the CLB.

1995 Statement of Consideration, 60 Fed. Reg. at 22,473; *accord*, 1991 Statement of Consideration, 56 Fed. Reg. at 64,946. Notwithstanding the State's assertion that Units 2 and 3 do not satisfy the Final (or Draft) GDC, that issue is simply outside the permissible scope of this license renewal proceeding.

New York AG Contention 20

IP3 does not provide reasonable assurance of adequate protection for the public health and safety as required by 10 C.F.R. § 50.57(a)(3) and is not in compliance with 10 C.F.R. Part 50, Appendix R because it fails to maintain a fire barrier with a one hour rating and thus also is in violation of 10 C.F.R. §§ 54.33(a), 54.35 and 50.54(h).

NYAG Petition at 203. The New York Attorney General challenges an October 4, 2007, NRC approval of Entergy's request to modify its 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 previously approved one hour fire barrier (found in 10 C.F.R. Part 50, Appendix R, § III.G.2.c.).⁵³ New York asserts that with the modification to that exemption, Entergy's LRA for Unit 3 is inadequate because it "fails to comply with the

⁵³ See "Entergy Nuclear Operations, Inc., Entergy Nuclear Indian Point 3, LLC, Indian Point Nuclear Generating Unit No. 3; Revision to Existing Exemptions," 72 Fed. Reg. 567,98 (Oct. 4, 2007).

requirements of Appendix A, Criterion 3 of 10 C.F.R. Part 50 and Appendix R (Section G.2) of 10 C.F.R. Part 50.” NYAG Petition at 203.

Staff Response to New York AG Contention 20

The NRC Staff opposes the admission of this contention. First, the granting of exemptions is allowed in accordance with 10 C.F.R. § 50.12. To claim, as Petitioner tries, that any exemption is a violation of 10 C.F.R. §§ 54.33(a) and 54.35 because they are deviations from the regulations, NYAG Petition at 203, would mean that the NRC could never issue exemptions or modifications to previously granted exemptions for any reason. Therefore, taking New York’s argument to its logical conclusion, every nuclear power plant in the country would be in breach of the NRC’s regulations even though the NRC had legally granted an exemption to those facilities under the terms and conditions outlined in 10 C.F.R. § 50.12. Such an assertion lacks any legal foundation, and constitutes an impermissible challenge to 10 C.F.R. § 50.12. Further, adjudicatory hearings on license renewal are not the proper forum for challenges to NRC regulations. 10 C.F.R. § 2.335(a).

New York also improperly attempts to challenge the exemption itself, claiming that the 24-minute and 30-minute rated fire barriers do not provide enough protection.⁵⁴ In this regard, New York fails 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). New York does not challenge

⁵⁴ There is no right to a hearing on an exemption 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.”). Moreover, on February 13, 2007, the NRC Staff consulted with the responsible NY State official, regarding the proposed exemption; the State official had no comment. See Letter from U.S. NRC to Michael Balduzzi, Entergy Nuclear Operations, Re: Indian Point Nuclear Generating Station Unit No. 3 – Environmental Assessment Regarding the Revision of Existing Exemptions from Title 10 of the Code of Federal Regulations Part 50, Appendix R Requirements – (TAC No. MD2671), (Sept. 24, 2007) (Agencywide Documents and Access Management System (ADAMS) Accession No. ML072110018).

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. As such, the exemption would be included in a renewed license, but only those structures, systems, and components subject to aging management review are within the scope of a license renewal proceeding. 1995 Statement of Consideration, 60 Fed. Reg. at 22,473-74. New York does not show that any portion of the fire protection exemption has not been adequately considered in the LRA, and it therefore fails to raise an appropriate issue for consideration in this proceeding. The Licensing Board and Commission have determined that intervenors may not challenge a plant's CLB because "such issues: (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.

New York AG Contention 21

Indian Point 1 does not provide reasonable assurance of adequate protection for the public health and safety as required by 10 C.F.R. § 50.57(a)(3) and the UFSAR insufficiently analyzes the plant's capability to withstand a design basis and safe shutdown earthquake because it fails to include more recent Information regarding the type, frequency, and severity of potential earthquakes in violation of 10 C.F.R. §§ 50.54(h), 54.33(a), 54.35 and 10 C.F.R. Part 100, Appendix A.

NYAG Petition at 207. To support this contention, New York asserts that even though the NRC approved the mothballing of the reactor at IP1, the Indian Point Nuclear Power Station continues to use various IP1 components. New York cites to the 1980 decommissioning plan for IP1 stating that, "Unit 1 contains extensive common facilities that are required for the continued operation of Units 2 and 3." *Id.* at 207.

New York alleges, without showing any current documentation or information regarding Units 2 and 3 to support its contention, that Units 2 and 3 continue to use IP1's leaking spent fuel pool. New York further alleges that in addition, at least some of the IP1 structure, if it were damaged in an earthquake, could cause damage to components of IP2 and IP3, including but not limited to, the reactor containment, off-site power supplies and spent fuel pools. *See id.* at 207.

New York further alleges that the most recent seismic data reported in the Safety Analysis Report for IP1 appears to be over 20 years old, and thus does not include a substantial body of new data gathered in the last 20 years from an extensive network of earthquake detection systems; New York alleges that new data developed in the last 20 years discloses a substantially higher likelihood of significant earthquake activity in the vicinity of IP1 that could exceed the earthquake design for the facility, and that new techniques and many modern seismic design aspects of ground motions were not considered for IP 1 in the UFSAR or the LRA. *Id.* at 208. To support this contention, New York submits the declarations of Lynn R. Sykes and Leonardo Seeber of the Lamont Doherty Earth Observatory of Columbia University.

Staff Response to New York Contention 21

The Staff opposes the admission of this contention on the grounds that 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, 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)(iii),(iv) and (vi). New York fails to show with any particularity or clear or current evidence that the IP1 spent fuel pool is part of the current licensing action, or that it has not been adequately considered in the LRA, to the extent that it may impact IP2 and IP3.

Further, the State fails to show that new seismic information should be considered in the license renewal action. The Commission has provided guidance for license renewal adjudications regarding what safety and environmental issues fall within or beyond its license renewal requirements. *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. 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 for IP1, IP2 and IP3 facilities. The Commission routinely oversees a broad range of operating issues for IP2 and 3 and pertinent issues for IP1 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. New York, without proffering sufficient information or evidence, argues that IP1 components are used or shared by IP2 and IP3. It fails to specify the IP1 components of concern to it, and it fails to show that those components have not been adequately considered in the Applicant’s aging management program. New York under 10 C.F.R. § 2.309(f)(1)(v), is required 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 the petitioner intends to rely to establish those facts or expert opinion. New York fails to do so. Further, the issue raised in the contention is outside the scope of this license amendment proceeding, is not material to the findings the NRC must make to support a license amendment decision, and lacks sufficient information to show that a genuine dispute exists on a material issue of law or fact. Accordingly, the contention is inadmissible. In addition, New York raised similar issues with respect to the Applicant’s SAMA analysis in New York AG Contention 14. The Staff hereby incorporates by reference its Response to New York AG Contention 14.

New York AG Contention 22

IP2 and IP3 do not provide reasonable assurance of adequate protection for the public health and safety as required by 10 C.F.R. § 50.57 (a)(3) and the UFSARs for IP2 and IP3 insufficiently analyze each unit’s capability to withstand a design basis and safe shutdown earthquake because they fail to include more recent information regarding the type, frequency and severity of potential earthquakes in violation of 10 C.F.R. §§ 54.33(a), 54.35 and 10 C.F.R. Part 100, Appendix A.

NYAG Petition at 209. To support this contention, New York refers to the UFSARs for IP2 and IP3, and claims that the UFSARs do not include more recent information regarding the type, frequency and severity of potential earthquakes; and that the UFSARs fail to include an analysis of how that data impacts the application of 10 C.F.R. Part 100, Appendix A for each plant. *Id.* In addition, the petition alleges that the most recent seismic data is more than 25 years old for IP2 and IP3, and does not include a substantial body of new work, *Id.* at 210. The petition further alleges that the discussion of the seismic analysis in the ER discloses only, in summary fashion, that seismic data was taken from the IPEEE submittal by IP2 and IP3, and that new data, not shown to have been used in doing the IPEEE or SAMA's seismic probability or damage analyses, should be included. *Id.* at 211. The petition further alleges that new techniques and many modern seismic design aspects of ground motions are not sufficiently documented in the LRA, ER or IPEEE; that the LRA, IPEEE and SAMA fail to demonstrate whether any analyses that may have been made adequately evaluate either the likelihood or the consequences of a severe seismic accident at IP2 or IP3; *id.* at 212; and that the requirements of 10 C.F.R. Part 100, Appendix A, particularly Sections iv, v and vi, impose a duty on the Applicant to thoroughly analyze the available seismic data in determining the design necessary for a safe response to the design basis and safe shutdown earthquake. *Id.* For supporting evidence, the New York AG provides the Declarations of Lynn R. Sykes and Leonardo Seeburg, of the Lamont Doherty Earth Observatory of Columbia University and other references included in the discussion.

Staff Response to New York AG Contention 22

The Staff opposes admission of this contention on the grounds that 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 amendment 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)(iii),(iv),(vi).

The Petitioner cites 10 C.F.R. § 51.53 (c)(ii) (L) which states:

If the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided.

New York fails to show any reason to believe that the Applicant's SAMAS considered inadequate assumptions or inputs, or that they would significantly change if new seismic information were to be considered. Thus, the State fails to show a genuine dispute of material fact, contrary to § 2.309(f)(1)(vi).

Further, an analysis of the potential impact of an earthquake on the plant structures and components was done under current licensing operations. The assertions in paragraphs 1-4 and 6-8 of this contention question the adequacy of data, as provided in the UFSAR and IPEEE. These documents are part of the CLB for Indian Point Units 2 and 3, and are not re-subjected to review under license renewal, as the Commission instructed in its Statement of Consideration for 10 C.F.R. Part 54. 1991 Statement of Consideration, 56 Fed. Reg. at 64, 951. Further, paragraph 5 is not relevant as it does not provide a basis of comparison or relevance to the LRA; and paragraphs 9 and 10 fail to provide any grounds to show the LRA is lacking in any specific respects.

The adequacy of the facility's seismic analyses is a matter that concerns current operations, and is not appropriate for consideration in a license renewal proceeding. 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). 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.

New York’s attempt to challenge current regulatory compliance in a license renewal proceeding raises an issue that is outside the scope of the proceeding. In the 1991 Statement of Consideration, 56 Fed. Reg. at 64,946, the Commission stated, “other than with respect to aging issues and issues that arise when significant new information becomes available, the NRC does not inquire into safety issues in the license renewal process but presumes that the current regulatory process is adequate.” Further, 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. It further 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.” *Id.* Similarly, in its 1995 Statement of Consideration, the Commission stated, “Separating the subjects into two different sections should minimize any possibility of misinterpreting the scope of the renewal review and finding.” 60 Fed. Reg. at 22,482. Therefore, any argument based on the CLB is not material to the findings the NRC must make; as such, New York’s argument fails the materiality requirement of 10 C.F.R. § 2.309(f)(1)(iv). Accordingly, this contention is not within the scope of this license renewal proceeding, and should be rejected. New York raised similar issues, with respect to

the Applicant's SAMA analysis, in New York AG Contention 15. The Staff hereby incorporates by reference its Response to New York AG Contention 15.

New York AG Contention 23

The license renewal application for IP2 and IP3 fails to comply with the requirements of 10 C.F.R. § 54.21(a) because the applicant has not proposed comprehensive baseline inspections to support its relicensing application and proposed 20-year life extensions.

NYAG Petition at 217. As part of this contention, New York claims that "the NRC should require Entergy to conduct a thorough baseline inspection of both IP2 and IP3. These inspections should involve both visual and physical characterization and the non-destructive testing (NDT) of structures and components." *Id.* at 218 (emphasis added). As a basis for this, Petitioner claims that "[b]asic engineering principles dictate that any nuclear facility seeking to extend its operations for 20 years beyond its 40-year design life period should be subjected to rigorous inspection and testing by the NRC." *Id.* Further, New York claims that "10 C.F.R. § 54.21, require[s] a preapplication audit and inspection by the applicant and the NRC." *Id.* at 217.

Staff Response to New York AG Contention 23

The Staff opposes the admission of this contention because New York's assertions of the things it feels the NRC should do, rather than the things a licensee is required to do under NRC regulations, does not establish a regulatory requirement. Further, the NRC does not require the type of baseline inspections and testing recommended by the State. Adjudicatory hearings are limited to resolving controversies regarding the "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 inter alia* 10 C.F.R. §§ 54.21(a) and (c), 54.4. Thus, this is not the proper avenue for addressing this issue.

Further, New York's statement regarding the requirements of 10 C.F.R. § 54.21 is misplaced. Section 54.21 addresses the information that must be contained in the application: *i.e.*, the systems, structures, and components that must be included in the integrated plant assessment; updates to the plant's CLB that occur after submitting the LRA; a list of the time-limited aging analyses; and an FSAR supplement. Nothing in § 54.21 requires a pre-application audit or inspection. Therefore, proposed NYAG Contention 23 fails to state a proper legal basis, and is inadmissible.

New York AG Contention 24

The license renewal application for IP2 and IP3 fails to comply with 10 C.F.R. § 54.21(a)(1)(i) because the applicant has not certified the present integrity of the containment structures and has not committed to an adequate aging management program to ensure the continued integrity of the containment structures during the proposed life extensions.

NYAG Petition at 21. In support of NYAG Contention 24, New York states that the NRC should exercise its regulatory discretion to require Entergy to conduct enhanced inspections because the LRA discloses significant concerns regarding the continuing integrity of the containment structures. NYAG Petition at 221. Further, New York states that the water/cement ratio for the containment structures at IP2 and IP3 is beyond the acceptance criteria established after construction was completed, and therefore, the facility should conduct enhanced inspections to confirm the integrity of the concrete. *Id.* at 222 (*citing* LRA 3.5-6 and NUREG-1801 (GALL Report)). The State asserts, further, that Entergy has not proposed to conduct enhanced inspections of the containment structures. *Id.* at 223.

Staff Response to New York AG Contention 24

The Staff opposes NYAG Contention 24 as proposed. To the extent that New York is requesting that the NRC exercise regulatory authority to require inspections of the concrete, such a request reflects a concern with a current operating or compliance issue, and is not reviewable in a license renewal proceeding. See 10 C.F.R. § 54.30. Further, New York Contention 24 is vague and unsupported. New York acknowledges that the application includes a containment leak rate program and a containment inservice inspection program, but fails to explain the enhancements that the NYAG alleges must be performed. See *e.g.*, NYAG Petition at 223 (*citing* LRA, Appendix B, § B.1.7 (Containment Leak Rate Program, § B.1.8 (Containment Inservice Inspection))).

Moreover, the citations provided by New York do not support Contention 24. The LRA shows that concrete in accessible and inaccessible areas is designed in accordance with American Concrete Institute (ACI) specification ACI 318, Building Code Requirements for Reinforced Concrete, and that water/cement ratios were in accordance with the version of ACI 318 used in construction. LRA at 3.5-6. The water/cement ratios are outside the established range of 0.35 to 0.45, provided in the guidance of NUREG-1801. See *id.* However, while the State asserts, "When the water/cement ratio exceeds this range, the facility is expected to conduct enhanced inspections to confirm the integrity of concrete in the containment structures. See LRA 3.5-6; NUREG 1801 (GALL Report)," NYAG Petition at 222, neither of the references provided by the State support its expectation for an "enhanced inspection."⁵⁵

⁵⁵ NUREG-1801 includes a section that addresses the elements of pressurized water reactor (PWR) concrete containment structures. See NUREG-1801 at II A1-1 and the associated table. The water-to-concrete ratio is not discussed for aging management plans for containment. The water-to-cement ratio of 0.35-0.45 does appear in discussions for other structures and components, but this appears in the context of evaluations of inaccessible areas, rather than "enhanced inspections" of accessible areas. See *e.g. id.* at III A1-7 ((BWR Reactor Bldg., PWR Shield Bldg., Control Rm./Bldg.)). (continued. . .)

The State fails to explain how or why the LRA fails to comply with 10 C.F.R. § 54.21(a)(1)(i),⁵⁶ which requires an applicant to list structures and components (explicitly including containment) subject to an aging management review. The LRA lists the containment as subject to an AMR, and New York has not explained why the Applicant's list is non-compliant with § 54.21(a)(1)(i). See LRA at 2.4-2.

New York AG Contention 25

Entergy's license renewal application does not include an adequate plan to monitor and manage the effects of aging due to embrittlement of the reactor pressure vessels ("RPVs") and the associated internals.

NYAG Petition at 223. In support of NYAG Contention 25, the State provides the Declaration of Richard T. Lahey, Jr., Ph.D. With respect to vessel internals, the contention addresses to the core barrel, particularly the 'belt-line' region of the reactor core, the thermal shield, the baffle plates and formers (and the loads on associated bolts), and the intermediate shells in the core. NYAG Petition at 225 (*citing* Lahey Declaration, ¶ 15). The State alleges that the LRA does not discuss the performance of "any age-related accident analyses" or mention that the Applicant considered embrittlement when it assessed transient loads. NYAG Petition at 224. According

(. . .continued)

⁵⁶ 10 C.F.R. § 54.21(a)(1) provides as follows:

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 . . . the containment

to the State, brittle components cannot withstand shock loads and may fail. *Id. citing* Lahey Declaration, ¶ 16. Further, it asserts that Entergy has not presented experiments or analyses to justify that a coolable core geometry will be maintained after a DBA LOCA; that tests of core samples demonstrate a shell band for IP2 that will not meet "Charpy Tests"; and that predicted embrittlement at Unit 3 implies operational limits for Unit 3. *Id.* at 226.

Staff Response to New York AG Contention 25

NYAG Contention 25 is not admissible, as it fails to identify an error or omission of required information from the application, or show that the LRA is deficient.

TLAAs, by definition, are "those licensee calculations and analyses that: . . . (5) Involve conclusions or provide the basis for conclusions related to the capability of the system, structure, and component to perform its intended functions, as delineated in § 54.4(b)" 10 C.F.R. § 54.3(a). New York fails to state or explain why or how the applicant's TLAAs do not show that the associated SSCs will perform their intended functions for LOCAs or transients. New York further fails to identify any regulation that requires the application to include separate analyses of LOCAs or transients as part of the LRA.

The LRA includes a TLAA for reactor vessel neutron embrittlement that directly addresses the Charpy test results, and analyzes the results by applying NRC guidance. See LRA § 4.2.2, at 4.2-2 - 4.2-3. New York fails to state how or why the analysis is deficient. The observations by New York that a Charpy test criterion is not met and that operational limits might be implied by embrittlement simply does not present any issue concerning the adequacy of the application.

"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 (citation omitted). New York fails to show the existence of a material issue for license renewal. Accordingly, NYAG Contention 25 should be rejected.

New York AG Contention 26

Entergy's license renewal application does not include an adequate plan to monitor and manage the effects of aging due to metal fatigue on key reactor components.

NYAG Petition at 226. In support of Contention 26, New York states that, as documented in the LRA, the "cumulative usage factors" ("CUFs") for some key components are greater than 1.0. *Id.* at 228. New York asserts that these CUFs should be less than one. *Id.* at 227-28. New York states that Entergy proposes to manage the effects of aging by either 1) refining the fatigue analyses to re-assess the CUF, 2) manage the effects of aging due to fatigue by an NRC-approved inspection program, or 3) repair or replace the affected component, *Id.* at 231 (*citing* LRA at 4.3-22), and it asserts that these proposals are inadequate. *Id.* at 231-32. Further, New York states that components that are now known to exceed the CUF factor of 1.0 should be replaced immediately, and that a monitoring plan with a clear inspection schedule, should be established, *Id.* at 232. New York asserts that the Applicant's plan to obtain approval, in the future, of a program that is currently undetermined does not constitute an adequate aging management plan and is not consistent with 10 C.F.R. §§ 54.21(c)(1)(iii) and 54.21(a)(3). *Id.* Finally, New York asserts that Entergy's proposal amounts to re-working the numbers, and fails to provide the details of its inspection plan; and it observes that a different Licensing Board admitted a contention on reworking the CUF in another license renewal proceeding. *Id.* at 232-33 (*citing* *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee), (Nov. 7, 2007)).

Staff Response to NYAG Contention 26

The Staff does not oppose the admission of New York Contention 26 limited to the extent that it challenges how the LRA demonstrates that it satisfies the elements of

§ 54.21(c)(1)(iii) for the CUF.⁵⁷ However, the Staff opposes the admission of this contention to the extent that it suggests that arbitrary assumptions will be used in any refined analyses. See NYAG Petition at 231. That suggestion is unsupported speculation, and does not support admissibility. See Memorandum and Order (Denying the Village of Buchanan's Hearing Request and Petition to Intervene), dated December 5, 2007, at 7 and citations therein. Finally, New York's request for immediate action by Entergy to replace components appears to be a current operating concern, and does not present an issue for a license renewal proceeding. 10 C.F.R. § 54.30.

New York AG Contention 27

The NRC should review in this relicensing proceeding the safety of the on-site storage of spent fuel and the consequences of a terrorist attack on any of the three spent fuel pools at Indian Point.

NYAG Petition at 234. New York claims that although the GEIS does not require an environmental assessment of the effects of a terrorist attack on spent fuel pools ("SFPs"), NEPA, the location of Indian Point's three spent fuel pools, the Mothers for Peace decision, and NRC SAMA regulations. NYAG Petition at 234-45. In particular, New York points to the fact that Indian Point's spent fuel pools are located outside of containment, reports that terrorists have looked into attacking nuclear power plants, and the large population located within 50 miles of Indian Point to buttress its desire for a terrorism review of the three spent fuel pools. *Id.*

Staff Response to New York AG Contention 27

⁵⁷ A CUF contention was admitted in the *Vermont Yankee* proceeding as "VY Contention 2", on September 22, 2006. See *Vermont Yankee*, LBP-06-20, 64 NRC 131 at 183. (2006). Subsequently, VY Contention 2 was explicitly held in abeyance in the Licensing Board's Order of Nov. 7, 2007. *Entergy Nuclear Vermont Yankee, L.L.C., and Entergy Nuclear Operations, Inc. (Vermont Yankee)* LBP 07-15, ___ NRC ___ (Nov. 11, 2007) (slip op at 12). "Contention 2A," was admitted, concerning a critique of Entergy's calculations of environmental fatigue correction factors, and a critique of the calculations of 60-year CUFs. *Id.* at 10-11.

The Staff opposes the admission of this contention on the grounds that the Commission has clearly ruled that NEPA does not require consideration of the environmental impact of terrorist acts in a license renewal proceeding. This matter is addressed in detail in the Staff's response to Clearwater Contention EC-6, *infra*, which is incorporated by reference herein.

Further, to the extent that New York wants the NRC to review the safety of the Unit 1 spent fuel pool ("SFP"), along with Units 2 and 3 SFPs, it fails to show that the Unit 1 SFP performs an intended function for Units 2 and 3 and is within the scope of this license renewal proceeding. Thus, New York does not reference the LRA, and fails to demonstrate that there are material issues of fact in dispute. See 10 C.F.R. § 2.309(f)(1)(vi). Accordingly, the contention is out of scope and should not be admitted.

New York AG Contention 28

Radionuclides leaking from IP1 and IP2 spent fuel pools are contaminating groundwater and the Hudson River, and NEPA requires that the NRC examine the environmental impacts of these leaks in the context of this license renewal proceeding.

NYAG Petition at 245. In support of its contention, New York submitted the Declaration of Timothy Rice, an environmental radiation specialist with the New York State Department of Environmental Conservation.

Staff Response to New York AG Contention 28

The Staff opposes the admission of this Contention, because it constitutes an impermissible challenge to Commission regulations, is beyond the scope of this proceeding, and fails to raise a genuine dispute as to a material issue of law or fact.

New York AG Contention 28 challenges the GEIS and the Commission's determination that the radiological impacts on the environment during the period of license renewal can be addressed on a generic basis, and that the impact is small. A similar contention, asserting that

the Commission must undertake a site-specific review, was raised by one of the petitioners (Ms. Lorion) in *Turkey Point*. The Board found the contention inadmissible, stating as follows.

In asserting that the NRC must prepare a site-specific supplemental EIS to the original 1972 Turkey Point EIS, Ms. Lorion's second contention impermissibly challenges the Commission's license renewal regulations. . . . Although the Commission's license renewal regulations require that the Applicant's environmental report identify any new and significant information regarding the environmental impacts of license renewal, see 10 C.F.R. § 51.53(c)(3)(iv), and require the Staff to consider such information in the Supplemental EIS, see 10 C.F.R. § 51.95(c)(4), Ms. Lorion can challenge the Staff's treatment of that information with respect to an environmental impact codified in 10 C.F.R. Part 51, Appendix B as a Category 1 issue only by filing a rulemaking petition pursuant to 10 C.F.R. § 2.802 and such information cannot be challenged in a license renewal proceeding absent a waiver of the renewal rules by the Commission.

Turkey Point, LBP-01-6, 53 NRC at 154-155. See *Vermont Yankee and Pilgrim*, CLI-07-3, 65 NRC at 19-21.⁵⁸ New York's contention, that the Commission must undertake a site-specific review of the radiological impacts of leaks at Indian Point is similarly inadmissible.

Finally, New York's expert, Timothy Rice, raises no issues of fact. He summarizes general information regarding the various radionuclides released by all nuclear plants, recounts the history of leaks at the Indian Point site, and recites the levels of tritium found in monitoring wells close to Unit 2's spent fuel pool and levels of strontium-90 and other radionuclides associated with Unit 1's spent fuel pool. Declaration of Timothy Rice, ¶¶ 10-21, pp. 3-6. Nothing in his Declaration, however, controverts information in Entergy's application regarding the environmental impacts associated with known leaks at Indian Point's spent fuel pools.

⁵⁸ See *Turkey Point*, CLI-01-17, 54 NRC at 12; *Pilgrim*, LBP-06-23, 64 NRC at 288.

New York AG Contention 28 thus constitutes an impermissible challenge to Commission regulations, is out of scope, and raises no genuine issues of fact or law. It is, therefore, inadmissible.

New York AG Contention 29

The Environmental Report fails to address emergency preparedness and evacuation planning for Indian Point, and thus violates the requirements of the National Environmental Policy Act.

NYAG Petition at 253. In support of this contention, New York describes the large population located in the communities surrounding Indian Point, states that the Applicant's ER does not "discuss or analyze" Indian Point's Radiological Emergency Preparedness Plan ("RERP"), and asserts that without an "analysis or discussion of the evacuation plan for Indian Point in the [ER], . . . the applicant's license renewal application fails to meet the requirements of NRC regulations and NEPA." *Id.* at 253, 254. Further, the State asserts that evacuation planning for Indian Point is deficient (*citing, inter alia*, the large population, limited roadways, the refusal by three area counties to certify the plans, and adverse findings in a report published by James Lee Witt Associates). *Id.* at 260-269. New York then argues that while the GEIS specifically considered the environmental impacts of postulated accidents (including "severe accidents"),⁵⁹ as well as the role of emergency preparedness and evacuation planning in mitigating those impacts, *Id.* at 257-259, the GEIS "does not address the unique challenges posed by Indian Point," such as the large population, local geography, limited roadways, and non-certification of emergency plans by local officials. *Id.* at 259, 270.

⁵⁹ See 10 C.F.R. Part 51, Appendix B, Table B-1 ("Postulated Accidents"). Appendix B treats "design basis accidents" as a Category 1 issue, while "severe accidents" are treated as a Category 2 issue for which "alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives. See § 51.53(c)(3)(ii)(L)."

Staff Response to New York AG Contention 29

The Staff opposes the admission of this contention. The Commission has explicitly stated that emergency preparedness is not an appropriate subject for consideration in a license renewal proceeding, as this matter is addressed on an ongoing basis with respect to a facility's existing operating license under 10 C.F.R. Part 50. See 1991 Statement of Consideration, 56 Fed. Reg. at 64,967. As the Commission observed, the regulatory processes involved in evaluating the adequacy of emergency preparedness, under 10 C.F.R. Part 50, eliminate any need to consider emergency preparedness anew in connection with an application for license renewal:

Following each of the required exercises, findings are made concerning the success of the plan and, in some cases, weak and deficient areas that require correction are identified. These processes will continue during the renewal term. In conclusion, the Commission's regulations require the routine evaluation of the effectiveness of existing emergency preparedness plans against the 16 planning standards and the modification of emergency preparedness plans when the 16 standards are not met. Through its standards and required exercises, the Commission ensures that existing plans are adequate throughout the life of any plant even in the face of changing demographics and other site-related factors. Thus, these drills, performance criteria, and independent evaluations provide a process to ensure continued adequacy of emergency preparedness in light of changes in site characteristics that may occur during the term of the existing operating license, such as transportation systems and demographics. There is no need for a licensing review of emergency planning issues in the context of license renewal.

The NRC has determined that the current requirements, including continuing update requirements for emergency planning, provide reasonable assurance that an acceptable level of emergency preparedness exists at any operating reactor at any time in its operating lifetime. The Commission has amended 10 CFR 50.47 to clarify that no new finding on emergency preparedness will be made as part of a license renewal decision.

The Commission received a number of comments from public interest groups contending that current emergency preparedness plans are not adequate and that periodic revisions to existing emergency preparedness plans and the execution of

emergency plan exercises were generally considered inadequate to keep pace with changing demographics, land use, and transportation patterns. One commenter raised the issue that the evacuation time estimates would need to be reviewed in light of the changes in demography. The issue concerning the potential inadequacy of the existing plans, exercises, or evaluation time estimates to account for such changes does not involve matters limited to the renewal of operating licenses.

In conclusion, the Commission has carefully considered the issues raised by commenters on the need to make a finding on the adequacy of existing emergency preparedness plans in order to grant a renewal license. For the reasons stated above, the Commission concludes that the adequacy of existing emergency preparedness plans need not be considered anew as part of issuing a renewed operating license.

Id. Consistent with this determination, the Commission rejected comments urging that license renewal proceedings should consider the “[e]ffects of population changes, transportation and traffic factors, and location of nearby hazards,” inasmuch as those matters are addressed through other regulatory processes applicable to a facility’s existing license. *Id.* at 64,960. Accordingly, the adequacy of Indian Point’s emergency preparedness is not a proper subject for consideration in this proceeding.

The State’s argument that the adequacy of Indian Point’s evacuation planning should be considered as an environmental issue in this proceeding, based on its argument that the GEIS does not consider the “unique” site-specific aspects of evacuation planning at Indian Point, NYAG Petition at 259, 270, similarly fails to present an admissible issue in this proceeding. As the State recognizes, the GEIS specifically considers the environmental impacts of postulated accidents, and treats this as a Category 1 issue such that it need not be addressed in a site-specific ER.⁶⁰ Further, the GEIS considers the mitigation of accident consequences, § 5.23,

⁶⁰ See NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants” (May 1996), Chapter 5 (“Environmental Impacts of Postulated Accidents”).
(continued. . .)

and considers the role of emergency preparedness in mitigating accident consequences. *Id.*, § 5.2.3.3. As the State acknowledges, the GEIS “concludes that evacuation planning is a Category 1 issue.” NYAG Petition at 263. Thus, this issue has been resolved by the Commission’s regulations adopting the GEIS and is not appropriate for further consideration in this license renewal proceeding.⁶¹

Despite New York’s argument to the contrary, neither NEPA nor the Commission’s regulations in 10 C.F.R. Part 51 require consideration of emergency preparedness in an applicant’s environmental report submitted in support of a license renewal application – nor has the State cited any legal authority to support this claim, as required.⁶² In essence, the State’s assertion constitutes an argument that emergency preparedness should be considered in an environmental report – but this assertion constitutes nothing more than an expression of its own view of what applicable regulatory requirements should be, constitutes an impermissible challenge to the Commission’s regulations adopting the GEIS, and fails to state an issue that is appropriate for adjudication in this proceeding. The contention should be rejected under 10 C.F.R. § 2.309(f)(1)(iii), (iv) and (vi).

(. . .continued)

⁶¹ Despite the State’s assertion that Indian Point presents unique site considerations, it is beyond dispute that the GEIS considered accident risks at a large number of reactor sites, including Indian Point, see, *e.g.*, GEIS at 5-14, 5-15, 5-17; further, the GEIS considered site-specific factors unique to Indian Point, including population, weather conditions, terrain, and accident consequences. See, *e.g.*, GEIS at 5-22 and Tables 5.5 – 5.11; Appendix C, § C.4.4 (“Indian Point”), at C-77 – C-92, and Appendix G, Tables G-3 – G-5.

⁶² As the State notes, NYAG Petition at 255, the Applicant considered population projections and “emergency response evacuation modeling “ in its analysis of accident consequences, presented in its severe accident mitigation alternatives analysis. See ER, § 4.21.5.1, at 4-52. The State does not show that the Applicant’s SAMAs failed to address this matter properly.

New York AG Contention 30

NEPA requires that the NRC review the Environmental Impacts of the outmoded once-through cooling water intake system used at Indian Point, which causes significant heat shock/thermal discharge impacts.

NYAG Petition at 271. New York states as its bases for this contention that Hudson River fish populations are adversely affected by discharges from the once-through cooling water system, and that the NRC should review the “destructive cooling water intake system” at Indian Point. *Id.* at 272-73. New York also asserts (1) that that Indian Point’s cooling water intake system discharges “do not meet New York water quality criteria”; (2) that Indian Point has failed to demonstrate that it meets these criteria or that it has a valid waiver under the Clean Water Act; and (3) that, due to the alleged impact of once-through cooling systems on Hudson River fish populations, the NRC should either deny the LRA outright, or condition license renewal on the construction of a closed-cycle cooling system. *Id.* at 271. Finally, New York challenges the adequacy of Entergy’s heat shock analysis contained within the ER. *Id.* at 279-80.

Staff Response to New York Contention 30

The Staff does not oppose the admission of this contention to the limited extent that it challenges the adequacy of the heat shock analysis provided in the ER. The Staff opposes the admission of the remainder of this contention, because it raises issues that are outside the authority of the NRC to regulate.

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 lies with the NYSDEC, as does the authority for determining the appropriate cooling system to be used at a nuclear power facility with respect to water quality considerations. 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 due to water quality considerations. For these reasons, this contention, with the limited exception of challenges to Entergy’s heat shock analysis in the ER, must be rejected.

New York AG Contention 31

NEPA requires that the NRC review the environmental impacts of the outmoded once-through cooling water intake system used at Indian Point, which causes massive impingement & entrainment of fish and shellfish.

NYAG Petition at 281. New York asserts that the once-through cooling system at Indian Point has caused “massive injury and destruction of tens of millions” of fish, and that the NRC must either reject the LRA outright or condition its approval on construction of closed-cycle cooling.

Id. The State further argues that the destructive nature of once-through cooling calls for “imposition of the final solution, which is for Entergy to stop using [closed-cycle cooling] altogether.” *Id.* at 282. With respect to the ER, New York contends that the impingement and entrainment analysis “fails to acknowledge the significant and obvious environmental impacts of once-through cooling.” *Id.* 287. Specifically, New York claims that the ER lacks any estimate of the numbers of fish impinged and entrained at Indian Point, that the ER provides misleading statements regarding impingement and entrainment, and that it relies upon mitigation measures provided in the allegedly outdated Hudson River Settlement Agreement. *Id.* at 287-88.

Staff Response to New York Contention 31

The Staff does not oppose the admission of this contention to the limited extent that it challenges the impingement and entrainment analysis provided in the ER. *Id.* at 287-89. The Staff opposes the contention’s admission insofar as it urges the NRC to require Indian Point to use closed-cycle cooling, because this issue is, outside the authority of the NRC. See the Staff’s response to New York AG Contention 30, *supra*, which is incorporated by reference herein.

New York AG Contention 32

NEPA requires that the NRC review the environmental impacts of the outmoded once-through cooling water intake system used at Indian Point, which harms endangered species and candidate threatened species.

NYAG Petition at 290. New York asserts that the NRC must use the consultative process of the Endangered Species Act (“ESA”) to determine whether impingement at Indian Point will jeopardize the shortnose sturgeon, an endangered species. *Id.* New York also claims that Entergy’s operation of Indian Point is in violation of the ESA, because the shortnose sturgeon becomes impinged at the plant and Entergy does not have an incidental takings permit. *Id.*

Staff Response to New York Contention 32

The Staff opposes admission of this contention because New York fails to allege facts sufficient to support the contention. In this contention, New York repeatedly makes the claim that the Applicant is taking a threatened or endangered species by operation of the intake structures at Indian Point, in violation of the ESA. See, e.g., NYAG Petition at 290. However, New York fails to provide evidence to support this claim. New York's expert relies in his Declaration on a report produced by the National Marine Fisheries Service ("NMFS") to establish that Indian Point's intake structures are causing impingement of shortnose sturgeon. See *id.* at 291. This report, cited in the expert's declaration at ¶ 27 and attached as Exhibit H to New York's petition, relies on data gathered from Hudson River plants that do not include Indian Point. The State's expert infers impingement at Indian Point, but provides no actual evidence of it. New York also fails to produce any document from the NMFS, the U.S. Fish and Wildlife Service ("FWS"), or any other agency that would support a contention that the ESA has been violated.

New York also argues that "Entergy fails in its attempt to discount [the] undeniable factual and legal consequence"—*i.e.*, violation of the ESA—of impingement of shortnose sturgeon at Indian Point. NYAG Petition at 295. Again, New York fails to provide any evidence that Entergy has in fact impinged shortnose sturgeon, and it has therefore failed to show that Entergy has violated the ESA. Similarly, while New York attempts to show that Entergy "admits" impingement in the LRA, *id.* at 296, the LRA makes no such admission. In this regard, Section 2.5 of the ER states:

Impingement on intake structures has been studied at Hudson River power plants since 1972. In 2000 NMFS stated that only 63 shortnose sturgeon have been collected in impingement samples from all six power plants on the Hudson River during a 26 year interval. . . . The NMFS estimated impingement at Indian Point to be approximately . . . 1.6 fish per year for the entire site since the installation of the Ristroph screens . . . in 1990 and 1991.

ER at 2-24 (emphasis added). Thus, Entergy does not admit to having impinged shortnose sturgeon at Indian Point; it merely cites estimates provided by the National Marine Fisheries Service.

In sum, New York has failed to provide facts to support this contention, relying instead on inferences and conjecture. Accordingly, this contention should be rejected for failing to satisfy 10 C.F.R. § 2.309(f)(1)(v) and (vi).

New York's Attempt to Adopt Riverkeeper Contention EC 2

At the end of its petition, New York states that it “hereby adopts and incorporates by references [sic] the following contentions submitted by Riverkeeper, Inc.: Contention EC 2, pursuant to 10 CF.R. § 2.309(f)(3).” NY Petition at 311. New York does not agree that Riverkeeper will act as the representative with respect to the contention and it does not include a joint designation with Riverkeeper stating who shall have the authority to act for the two entities with respect to the contention. Accordingly, New York's attempt to adopt Riverkeeper's contention does not conform to the requirements of 10 C.F.R. § 2.309, and should be rejected.

2. Clearwater

Clearwater Contention EC1

Failure of Environmental Report to Adequately Address the Impacts of Known and Unknown Leaks.

Clearwater Petition at 18. Here, Clearwater states its intention to adopt Contention 28 submitted by New York State and states that it “shares” the concerns raised by Riverkeeper in its Contention EC3. Clearwater Petition at 1-19. Consistent with that position, Clearwater repeats the contentions raised by the other two petitioners: that the application fails to adequately address new and significant information regarding leaks of radionuclides from the spent fuel pools for Indian Point Units 1 and 2. In support of its contention, Clearwater cited a

link to its website, which contains information related to a Technical Briefing and Roundtable Clearwater convened in March 2007. *Id.* at 22.

Staff Response to Clearwater Contention EC1

Clearwater Contention EC1 is inadmissible. For the reasons stated in response to New York AG Contention 28 and Riverkeeper Contention EC 3, Clearwater Contention EC1 constitutes an impermissible challenge to Commission regulations; raises an issue beyond the scope of this license renewal proceeding; lacks specificity; and fails to raise a dispute as to a material issue of law or fact.

In support of its contention that the application is deficient on the subject of spent fuel pool leaks Clearwater cites an article on its website that summarizes speeches made by participants at a Clearwater event. Clearwater Petition at 21. While several individuals appear to have made statements at the event, none of them is identified as a potential expert witness. None of the material in the website is supported by affidavit or any other evidence; and, in any event, the statements are immaterial, vague, speculative, fail to establish a genuine issue of fact or law, and, as they raise issues with respect to the current operation of Indian Point, raise issues that are beyond the scope of license renewal.

Simply put, the statements on Clearwater's website do not contravene any portion of the license renewal application. In its Petition at 23, Clearwater states that David Lochbaum and Phillip Musegaas presented information that radioactive material leaking at Indian Point was not being tracked and stated that radionuclides in "nearby wells" exceed New York State and EPA drinking water limits.⁶³ Both statements are immaterial and involve no dispute as to an issue of fact within the scope of this proceeding. First, requirements for tracking or monitoring of leaks

⁶³ Clearwater's Indian Point Technical Briefing and Round Table at <http://www.clearwater.org/news/indianpoint2007.html> last accessed on January 18, 2008.

of radioactive material are current operating issues that are beyond the scope of this proceeding. Second, the statement Clearwater cites is vague because it does not identify the “nearby wells” and it fails to point to any deficiency in the LRA or ER.

Clearwater’s reliance on Sergio Smiriglio’s statement is also misplaced. See *id.* Mr. Smiriglio’s statement that ground fractures under Indian Point “could contain contaminated water” is, on its face, speculative. Clearwater Petition at 23.

Further, the statements of Ward Stone, of NYSDEC, are immaterial. *Id.* Mr. Stone criticized the fish and wildlife sampling program. Clearwater Petition at 22. However, because of the way his remarks are summarized in the petition, it is unclear whether his criticism is directed at Entergy or at his own department. Indeed, a review of his remarks, as recorded in Clearwater’s website, strongly suggests that his remarks were directed at his own department. According to Clearwater’s website, Mr. Stone stated that he was “new to the case,” that the “fish sampling to date has been highly inadequate” and that “[i]f more thorough biota sampling had been done, the radionuclides that are leaving or have left Indian Point and gaining entry into the biota would already be determined.” He concluded his remarks with a promise that DEC would expand its testing program. Mr. Stone’s criticism of his own department’s sampling program is immaterial to Entergy’s application.

The material Clearwater references in support of this contention raises issues with respect to the current operation of Indian Point. However, issues regarding the current operation of the plant are beyond the scope of license renewal. *Turkey Point*, CLI-01-17, 54 NRC at 7. As the Commission explained in that matter, license renewal does not include issues that are “already monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight.” *Id.* To the extent that Clearwater is attempting to advance technical, safety issues or other subject to ongoing regulatory oversight via this environmental contention, the attempt should be rejected, as such matters concern current operations.

In sum, Clearwater Contention EC1 is unsupported and raises matters outside the scope of license renewal, and is therefore inadmissible. It is also inadmissible for the reasons set forth in the Staff's responses to Riverkeeper Contention EC 3 and New York Contention 28, which are hereby incorporated by reference herein.

Clearwater Contention EC 2

Entergy's Environmental Report Fails to Consider the Higher than Average Cancer Rates and Other Health Impacts in Counties Surrounding Indian Point.

Clearwater Petition at 24. Here, Clearwater admits that radiation exposure during the license renewal period is a Category 1 issue, but it asserts that there is "new and significant" evidence of higher than average cancer rates in the population living near Indian Point and that this evidence suggests that Indian Point's radionuclide emissions cause higher cancer rates than emissions from other nuclear plants. *Id.* In support of its contention, Clearwater cites the declaration of Joseph Mangano and a Reuters news article. *Id.* at 26-30. *Id.* at 26-29.

The Reuter's news article reported that a University of Mainz study on behalf of Germany's Federal Office for Radiation Protection found that children living within three miles of German nuclear plants have a significantly higher risk of developing leukemia and other forms of cancer. See Clearwater Petition at 26, *citing* http://news.yahoo.com/s/nm/20071208/hl_nm/cancer_germany_dc. With respect to Mr. Mangano, he states in his Declaration that airborne releases from Indian Point exceed that of most other US reactors "and can vary over time by a factor of 100 hundred (sic) or more", and that state and federal regulatory agencies report that radioactivity levels near Indian Point are "higher" and involve "large temporal variations, both indicating that emissions from Indian Point are entering the air, water, and food in measurable quantities." In support of his Declaration, Mr. Mangano appended his study, "Public Health Risks of Extending Licenses of the Indian

Point 2 and 3 Nuclear Reactors.” In that study, he states that baby teeth of children living near Indian Point showed average Strontium-90 levels that were higher than the levels found in the baby teeth of children living near any of the six other nuclear plants studied and that the average level of Strontium-90 in baby teeth for children living near Indian Point has risen sharply since the late 1980’s.

Staff Response to Clearwater Contention EC 2

Clearwater Contention EC 2 is inadmissible because it constitutes an impermissible challenge to Commission regulations, and lacks sufficient factual support. Clearwater’s contention 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)(3)(i) which 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 exposures during the license renewal period. That determination covers all applicants for license renewal, including Indian Point; further the impact has been determined to be small for all plants. However much Clearwater disagrees with this determination, the Commission’s determination 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 attack. As the Commission stated recently in *Vermont Yankee and Pilgrim*, “[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 Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-03, 65 NRC 13, 20 (2007).⁶⁴ The Commission went on to note that 10 C.F.R. 2.335(b) permits the waiver of a rule, 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. Here, however, Clearwater has not sought a waiver -- and even if it had, it has not demonstrated special circumstances warranting the acceptance of its contention.

While Clearwater asserts that “new and significant” evidence supports its contention, the proffered evidence is not new, significant or relevant. The news article Clearwater put forward regarding German nuclear plants, on its face, does not appear to be relevant to the issues in this proceeding, regarding the Indian Point nuclear plant – an NRC-licensed and regulated plant in the United States, involving a different plant and a different set of regulatory requirements and processes.

Clearwater’s only other support for this contention is the Declaration of Joseph Mangano. That Declaration and its attached report are similar to those submitted by CRORIP in support of its 10 C.F.R. § 2.335 Petition. As the NRC Staff made clear in its “Response to the Petition for Waiver of Commission Regulations Filed by CRORIP” (which is incorporated herein by reference), Mr. Mangano failed to demonstrate special circumstances warranting a waiver of the rule so as to undertake a site-specific reconsideration of the Category 1 determination regarding radiation exposures. Many of Mr. Mangano’s assertions (that all nuclear power reactors emit radioactivity, that there is no safe low dose exposure to radioactivity, that children are more susceptible to radiation exposure, and his asserted statistical link between the level of

⁶⁴ See also *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 13-15 (2001).

Strontium-90 in children's teeth and the incidence of childhood cancer at Indian Point and other reactors) are not unique to Indian Point and are not relevant to the issues in this proceeding. The general applicability of these claims to all nuclear plants undermines their use in this adjudicatory proceeding; by their nature, they are more *apropos* of a request for rulemaking under 10 C.F.R. § 2.802. Moreover, Mr. Mangano has not shown that Indian Point Units 2 and 3 release higher levels of airborne radiation than other NRC-licensed nuclear plants – and, in fact, the reports he cites contradict his allegations.⁶⁵ Finally, Mr. Mangano's study regarding levels of Strontium-90 in baby teeth does not constitute new information. He made these claims at least as early as 2000.⁶⁶ The NRC again addressed Mr. Mangano's claims three years ago in "Backgrounder on Radiation Protection and the 'Tooth Fairy' Issue,"⁶⁷ prepared by the Office of Public Affairs. Thus Mr. Mangano's claims are hardly new.

As the Commission wrote in *Vermont Yankee and Pilgrim*, "[a]djudicating Category 1 issues site by site based merely on a claim of 'new and significant information' would defeat the purpose of resolving generic issues in a GEIS." *Vermont Yankee and Pilgrim*, CLI-07-03, 65

⁶⁵ See "NRC Staff's Response to the Petition for Waiver of Commission Regulations Filed by CRORIP," dated January 22, 2008, at 8-9, fn. 7. And, in any event, as the Commission explained in rejecting a similar Mangano study as a basis to "reopen" in the license renewal proceeding for Millstone Units 2 and 3, even if the assertions were correct, the issue of excessive emissions would pertain to operations under the current license, and "[t]he alleged problem would not be a reason for denying license renewal." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-06-04, 63 NRC 32, 37-38 (2006).

⁶⁶ Mr. Mangano published an article in 2000 regarding the levels of strontium-90 in baby teeth. J. M. Gould, E. J. Sternglass, J. D. Sherman, J. Brown, W. McDonnell, and J. J. Mangano, 2000. "Strontium-90 in Deciduous Teeth as a Factor in Early Childhood Cancer." *International Journal of Health Services*. Vol. 30, No. 3; and Mangano, J. et al., 2003 "An Unexpected Rise in Strontium-90 in US Deciduous Teeth in the 1990s." *The Science of the Total Environment*, Elsevier Press.

⁶⁷ "Backgrounder on Radiation Protection and the 'Tooth Fairy' Issue," is available on the NRC's public website at <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/tooth-fairy.html>.

NRC at 21. Clearwater's Contention EC 2 would have just that effect. It is, therefore, inadmissible.

Clearwater Contention EC 3

Entergy's Environmental Report Contains a Seriously Flawed Environmental Justice Analysis that Does Not Adequately Assess the Impacts of Indian Point on the Minority, Low-Income and Disabled Populations in the Area Surrounding Indian Point.

Clearwater Petition at 31. Clearwater contends that (1) the ER uses flawed methodology and incomplete analysis, and (2) the ER fails to acknowledge or describe potential impacts upon the minority and low-income populations around Indian Point. *Id.* Clearwater lists several specific impacts on the minority and low-income populations: First, minority communities will be more susceptible to cancer, *Id.* at 41; second, subsistence fisherman will suffer disparate impacts from radiation, *Id.* at 42; third, low-income populations will be more severely impacted by an evacuation, *Id.* at 47; fourth, the minority, low-income and disabled population in special facilities will be severely impacted by an evacuation, *Id.* at 48, and fifth, the production and storage of nuclear fuel will have a disparate impact on Native Americans, *Id.* at 53.

Staff Response to Clearwater Contention EC 3

The Staff opposes the admission of this contention, because it does not set forth sufficient information to show that a genuine dispute exists regarding the Applicant's discussion of the environmental impacts on minority and low-income populations, and it raises issues that are beyond the scope of license renewal, including evacuation plans and uranium fuel cycle issues. See 10 C.F.R. § 2.309(f)(1)(iv), (v), and (vi).

The Commission has held that "disparate impact" analysis is the agency's principal tool for advancing environmental justice ("EJ") under NEPA. *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-03, 47 NRC 77, 100 (1998). Further, the "NRC's goal is to identify and adequately weigh, or mitigate, effects on low-income and minority communities

that become apparent only by considering factors peculiar to those communities.” *Id.*

Subsequently, in a proceeding involving the licensing of a proposed fuel storage facility, the Commission reiterated that Executive Order 12,898 instructed Federal agencies to consider EJ in their decisions: “[T]hat is, whether a proposed government action will have a disproportionately high and adverse environmental impact on minorities and low-income populations.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-2-20, 56 NRC 147, 153 (2002) (citing Exec. Order No. 12,898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629 (Feb. 11, 1994)). Most recently, the Commission published its policy on the significance of Executive Order 12,898 and guidelines on when and how EJ will be considered in NRC licensing and regulatory actions. Therein, the Commission concluded:

The NRC’s obligation is to assess the proposed action for significant impacts to the physical or human environment. Thus, admissible contentions in this area are those which allege, with the requisite documentary basis and support as required by 10 CFR Part 2, that the proposed action will have significant adverse impacts on the physical or human environment that were not considered because the impacts to the community were not adequately evaluated.

“Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions”, 69 Fed. Reg. 52,040, 52,047 (Aug. 24, 2004). Finally, the Commission observed, “If there will be no significant impact as a result of the proposed action, it follows that an EJ review would not be necessary.” *Id.*

Clearwater fails to allege supporting facts or provide expert opinion to bolster several parts of this contention. The Commission has held that mere speculation or bare or conclusory assertions are insufficient to support a contention. See *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 253 (2007) (citing *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)).

Clearwater suggests, in the first half of its contention, that the ER contains flawed methodology and failed analysis. However, the Petition fails to provide any factual information or expert opinion on demographic methodologies or analysis, and does little more than suggest how the ER might be written differently. Clearwater Petition at 36-38. Clearwater continues in this vein with a long recitation of a variety of statistics, *id.* at 38-41, but does not address how the Applicant's ER fails to meet the environmental justice guidelines. The Petition similarly fails to provide the necessary allegation of facts or expert opinion to support the assertion that subsistence fishing is susceptible to disparate impacts from continued operation of Indian Point. Furthermore, although Clearwater asserts that minority groups around Indian Point are "more vulnerable" than the general minority population to the adverse impacts allegedly posed by Indian Point, *id.* at 41-42, it fails to demonstrate that there is a disproportionately high rate of cancer or other health risks among minority and low-income communities around Indian Point.

In addition, Clearwater advances as bases for its contention several impacts which are beyond the scope of license renewal. The Clearwater Petition suggests that minority and low-income communities will suffer a greater impact from an evacuation of the area due to a radiological accident. *Id.* at 47. It also argues that low-income and minority people form a large contingent of the local prisons, hospitals, and other similar facilities, and that these people will likewise suffer disproportionately in the event of a radiological event at Indian Point. *Id.* at 48. However, as discussed below, the Commission has expressly held that "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 (2005).

Clearwater's argument that the production and storage of nuclear fuel raises environmental justice concerns with the Native American population is also beyond the scope of this proceeding. Table B-1 in 10 C.F.R. Part 51 lists offsite radiological and non-radiological impacts from the uranium fuel cycle as Category 1 issues, meaning that the GEIS has

considered the environmental impacts, that a low significance level has been assigned to these topics, and that plant-specific mitigation measures do not need to be implemented. See 10 C.F.R. Part 51, Table B-1. In sum, Category 1 issues do not need to be included in the ER in a license renewal proceeding. See 10 C.F.R. § 51.53(c)(3)(i).

In summary, Clearwater has not provided factual allegations or expert opinion demonstrating the existence of an issue of material fact with the Applicant's environmental justice analysis. Moreover, Clearwater has relied on several bases that are beyond the scope of license renewal. Nowhere in its proposed contention and bases does Clearwater argue that the environmental impact from license renewal will have a disproportionately high and adverse impact on an identified minority or low-income population, relative to the general population. Since the proposed contention fails to identify a significant impact on a minority or low-income population resulting from the proposed action, it does not demonstrate a genuine dispute implicating EJ considerations and NEPA. Therefore, Clearwater Contention EC 3 does not satisfy the requirements of 10 C.F.R. § 2.309(f)(1), and should be rejected.

Clearwater Contention EC 4

Inadequate Analysis of Severe Accident Mitigation Alternatives

Clearwater Petition at 56. Clearwater asserts that Entergy's SAMA analysis is "incomplete, inaccurate and is not adequately based upon scientific and probabilistic analysis" because it "fails to adequately consider the possibility of a terrorist attack on Indian Point[,] the impacts of a radiological event at Indian Point, or an evacuation in the surrounding area particularly in connection with the EJ communities discussed in Clearwater's Contentions EC 3 and EC 6[.]" *Id.* Clearwater then states that it adopts Contentions 12-15 put forward by the State of New York, and that it shares the concerns raised by Riverkeeper in its Contention EC 2.

Staff Response to Clearwater Contention EC 4

Clearwater Contention EC 4 is brief and conclusory and adds nothing to the other contentions it references and seeks to incorporate. Thus, for the reasons set forth in the Staff's responses to New York Contentions 12-15, Riverkeeper Contention EC 2, and Clearwater Contentions EC 3 and EC 6 (which responses are incorporated by reference herein), this contention is inadmissible. Further, Clearwater's attempt to adopt and incorporate by reference the contentions filed by other Petitioners fails to meet the requirements of 10 C.F.R. § 2.309(f)(3) and should be rejected.

Clearwater Contention EC-5

Entergy's Environmental Report Fails to Adequately Consider Renewable Energy and Energy Efficiency Alternatives to the License Renewal of Indian Point

Clearwater Petition at 56. Clearwater bases its contention on the assertion that the Applicant's ER insufficiently assesses the potential for renewable energy and energy efficiency. With respect to renewable energy, Clearwater's argument is not that Entergy failed to analyze reasonable alternatives, but that "Entergy . . . acknowledged the possibility of renewable energy, but discounted it." Clearwater Petition at 57. Furthermore, Clearwater admits that the ER discusses no fewer than thirteen energy alternatives, stating that Entergy dismisses them "with a superficial analysis of their feasibility and costs and benefits." *Id.* at 58.

Staff Response to Clearwater Contention EC 5

The Staff opposes the admission of this contention on the grounds that it fails to assert any issue of law or fact that is material to the findings the NRC must make in this proceeding, and fails to state a genuine dispute of material fact, as required by 10 C.F.R. § 2.309(f)(1)(i) and (vi).

Clearwater engages in a lengthy discussion of energy efficiency alternatives. However, Clearwater fails to demonstrate why Entergy's analysis of these alternatives is insufficient.

Clearwater has failed to raise an issue of law or fact that would affect the determination the NRC must make for license renewal. Clearwater's bare assertion that the energy alternatives analysis is flawed, without explaining how or why the analysis falls short, is insufficient to support the contention. Moreover, Clearwater's suggestion that NEPA requires consideration of energy efficiency as an alternative is contrary to Commission precedent, as discussed in the Staff's response to New York AG Contention 9, which is incorporated by reference herein. For the foregoing reasons, Clearwater's Proposed Contention EC 5 should be denied.

Clearwater Contention EC 6

Entergy's Environmental Report Fails to Consider the Potential Harm to the Surrounding Area of Terrorist Attack on the Facility including its Spent Fuel Pools, Control Rooms, the Water Intake Valves, Cooling Pipes and Electricity System

Clearwater Petition at 65. Clearwater argues that the Applicant should have included terrorist attacks in its Environmental Report because the potential for a terrorist attack is "significant and new" information, and because the impact of a terrorist attack should have been included in the Applicant's SAMA analysis. Clearwater Petition at 67-68.

Staff Response to Clearwater Contention EC 6

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)(iv).

The NRC has consistently held that contentions challenging an applicant's failure to consider terrorist attacks in its ER are beyond the scope of license renewal, and that such consideration is not required under NEPA. See *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.” CLI-07-8, 65 NRC at 129 (citing *Duke Energy Corp.* (McGuire Nuclear Energy Station Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358, 364 (2002)). The Commission 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)).⁶⁸ Moreover, the Commission noted that there is no basis for admitting a NEPA-terrorism contention in a license renewal proceeding because the NRC Staff's 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 determining the admissibility of Contention EC 6 in this proceeding. Accordingly, this contention must be rejected.

⁶⁸ The Commission also 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.

3. Connecticut Attorney General Richard Blumenthal

Conn. AG Contention A

Connecticut did not submit a “Contention A”.

Conn. AG Contention B

NRC has an affirmative legal obligation in the course of this proceeding to consider the consequences to human health and safety and the environment from an accident or attack on the accumulated stored fuel in a storage system that poses obvious risks.

Conn. Petition at 16. Connecticut asserts that the onsite storage of spent fuel at Indian Point is the result of the failure of the Department of Energy and the NRC to license and build a permanent national storage facility at Yucca Mountain, Nevada. It claims that the risk presented by the spent fuel storage pools is severe because of the quantity of radiological material that could be released and the vulnerability of the pools to accident or attack. *Id.* at 13.

Connecticut also argues that the “NRC has not properly evaluated the consequences of a terrorist attack on the spent fuel storage area and it has a legal obligation to do so now as part of the scope of this relicensing proceeding.” *Id.* at 14. The Petitioner relies on NRC and Department of Energy reports to support the asserted risks from a terrorist attack. *See id.* at 14-15.

Staff Response to Conn. AG Contention B

Connecticut’s request that the NRC address, in this proceeding, the environmental effects of spent fuel pool storage during the period of license renewal is out of scope and inadmissible. Further, the Staff opposes the admission of this contention on the basis that NEPA does not require NRC to consider the environmental impact of terrorist acts. *See the Staff’s response to Clearwater Proposed Contention EC 6, which is incorporated by reference herein.*

The environmental effects of spent fuel pool storage have been the subject of several Commission decisions, all of which have rejected the contention. See, e.g. *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC 13 (2007); *Turkey Point*, CLI-01-17, 54 NRC 3 (2001); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328 (1999). Recently, in the *Vermont Yankee and Pilgrim* license renewal proceeding, the Commission reaffirmed its determination that this issue is out of scope, as it does not concern the detrimental effects of aging. *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC at 19-21. The Commission characterized this type of contention as a challenge to the Commission's generic environmental findings, and held that it is not appropriate in an adjudicatory proceeding for license renewal. *Id.* at 20.

Agencies are free to determine issues on a case-by-case basis in adjudications or generically through rulemakings. With respect to spent fuel storage, the Commission chose to proceed generically and denominated the environmental effects of spent fuel storage as a Category 1 issue, an issue common to all nuclear plants. Contrary to Connecticut's unsupported assertion, the Commission does not have an "affirmative legal obligation" to consider spent fuel storage in this adjudicatory proceeding. The Commission has already considered the issue, in the rulemaking context. As the Commission explained in *Oconee*, its "generic determinations governing onsite waste storage preclude the Petitioners from attempting to introduce such waste issues into this adjudication." *Oconee*, CLI-99-11, 49 NRC at 343.

Connecticut also asserts that the NRC must "prepare an EIS that addresses significant new information regarding the safety and environmental impacts of a pool fire." Conn. Petition at 3. However, the Licensing Board in *Vermont Yankee* has held that this issue is not litigable in a license renewal proceeding. There the Board rejected a similar contention by the State of Massachusetts, which asserted that the applicant's environmental report was deficient for failing

to include “new and significant” information regarding the risks associated with spent fuel storage. *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-06-02, 64 NRC 131, 159-161 (2006), *aff’d*, *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC 13 (2007). Noting that spent fuel storage had been the subject of substantial litigation and that the ground with respect to this issue was “well-trod,” the Licensing Board held that spent fuel storage issues are “not litigable” in license renewal proceedings. *Id.* at 160.

Connecticut proffers much of the same information as Massachusetts, relying heavily on NUREG-1738,⁶⁹ NUREG/CR-4982,⁷⁰ and a National Academy of Science Report, “Safety and Security of Commercial Spent Nuclear Fuel Storage”⁷¹ and it makes the same legal argument as was made in *Vermont Yankee*. The information Connecticut puts forward was neither new nor significant when it was proffered in *Vermont Yankee*; it is no more so now and, in any event, it is irrelevant, as spent fuel storage issues are not admissible in license renewal adjudications. *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC at 19-21.

Conn. Contention B regarding spent fuel storage should, therefore, be denied.

Conn. Contention C

Evacuation Protocols Are Insufficient.

⁶⁹ NUREG-1738, Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants (Feb. 2001).

⁷⁰ NUREG/CR-4982, Severe Accidents in Spent Fuel Pools in Support of Generic Safety Issue 82 (July 1987).

⁷¹ NAS Committee on the Safety and Security of Commercial Spent Nuclear Fuel Storage, “Safety and Security of Commercial Spent Nuclear Fuel Storage” (National Academies Press, 2006).

Conn. AG Petition at 16. Connecticut argues that the NRC should review evacuation protocols as part of the license renewal process, and it asserts that the omission of evacuation plan review from license renewal proceedings is a “patent violation of NEPA.” *Id.* at 17.

Staff Response to Conn. Contention C

The Staff opposes the admission of this contention on the grounds that it is beyond the scope of this license renewal proceeding, and represents an impermissible challenge to NRC rules and regulations. See 10 C.F.R. §§ 2.309(f)(1) and 2.335(a).

The Commission has expressly held that “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 (2005). 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.” *Id.* 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). Indeed, the Licensing Board in another proceeding recently observed that, with a solitary exception,⁷² it is “not aware of any . . . license renewal proceeding in which a contention relating

⁷² 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 in that proceeding 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.).

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).

Finally, pursuant to 10 C.F.R. § 2.335(a), subject to limited exceptions, “no rule or regulation of the Commission, or any provision thereof . . . is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding subject to this part.” See, e.g., *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003); *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 NRC 253, 264 (2004). Therefore, this contention represents an impermissible challenge to NRC regulations excluding emergency planning considerations from license renewal proceedings.

In sum, this contention raises an issue that the Commission has clearly held is beyond the scope of license renewal. Furthermore, this contention raises a challenge to an NRC rule, which is not permitted in adjudicatory proceedings in the absence of a waiver under 10 C.F.R. § 2.335. For these reasons, Conn. AG Contention C is inadmissible and should be rejected.

4. CRORIP

CRORIP Contention

Health risks from the cumulative effects of radiation exposure traceable to Indian Point routine and accidental releases during the projected relicensing term are substantial, have not been adequately accounted for in the RLA and constitute new information which should be but which has not been analyzed.

CRORIP Petition at 4. In support of its sole contention, CRORIP submitted the Declaration of Joseph Mangano.

Staff Response to CRORIP Contention

CRORIP’s Contention is inadmissible as it involves a challenge to a Category 1 issue, radiation exposure to the public during the period of license renewal. This contention is similar

to Clearwater Contention EC 2 and, like Clearwater's contention, it is supported by a Declaration by Mr. Mangano.⁷³ As discussed above in response to Clearwater Contention EC 2, the Commission has determined that Category 1 issues are generic for all applicants for license renewal and that the impact of those issues is small. These determinations are beyond the scope of license renewal adjudicatory proceedings and are thus not subject to attack in such proceedings. *Duke Energy Corp.*(Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 343 (1999). In addition, the regulations at 10 C.F.R. § 2.335(a) explicitly prohibit such attacks absent a waiver. *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC at 20.

In tacit acknowledgment that its challenge to a Category 1 issue is outside of the scope of this proceeding, CRORIP sought a waiver of the rule pursuant to 10 C.F.R. § 2.335(b).⁷⁴ As set forth in the Staff's response to that petition, filed on January 22, 2008, CRORIP has failed to establish a prima facie showing of special circumstances that would warrant a waiver of the Commission's rules in this proceeding. The Staff's response to CRORIP's waiver petition is incorporated by reference herein.

In its petition for intervention CRORIP inexplicably asserts that its challenge is within the scope of this proceeding. CRORIP's position in its petition for intervention contradicts its position in its request for waiver. Moreover, it is clear that CRORIP's contention constitutes an

⁷³ This is not the first time that CRORIP's representative, Ms. Burton, has attempted to advance Mr. Mangano's study of strontium in baby teeth in an NRC license renewal proceeding. In the license renewal proceeding for Millstone Units 2 and 3, she similarly presented his views in a motion to reopen, in which she claimed that the GEIS Supplement prepared for the Millstone facility understated the site's strontium emissions. The Commission rejected the motion to reopen, finding, inter alia, that even if the assertions were correct, the issue of excessive emissions would pertain to operations under the current license, and "[t]he alleged problem would not be a reason for denying license renewal." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-06-04, 63 NRC 32, 37-38 (2006).

⁷⁴ "Connecticut Residents Opposed to Relicensing of Indian Point and its Designated Representative's 10 C.F.R. § 2.335 Petition," dated December 10, 2007.

impermissible challenge to the GIES, and must be rejected.⁷⁵ With no waiver of the rule, CRORIP's contention is inadmissible, and it should, therefore, be denied.

5. Riverkeeper

Riverkeeper Contention EC 1

Entergy's Environmental Report violates the National Environmental Policy Act ("NEPA") and NRC implementing regulations 10 C.F.R. § 51.45 and 10 C.F.R. § 51.53(c)(3)(ii)(B) because it fails to adequately analyze the adverse impacts on aquatic resources from heat shock, impingement and entrainment caused by Indian Point's once-through cooling system. Entergy's Environmental report also violates NEPA and NRC implementing regulations 10 C.F.R. § 51.45(b), (c), (d) because it fails to provide a complete analysis of the closed cycle cooling alternative for reducing or avoiding adverse environmental effects at Indian Point.

Riverkeeper Petition at 24. Riverkeeper bases its contention on the assertion that the Applicant's SPDES permit is not valid, and that the Applicant must therefore include an analysis of heat shock, impingement, and entrainment in the ER. *Id.* at 28-29. Moreover, Riverkeeper asserts that the analysis contained in the ER is "incomplete and flawed." *Id.* at 29. Riverkeeper supports this latter allegation by claiming that the ER relies on a 1999 Draft EIS from NYCDEC which was superseded by a final version in 2003. *Id.* at 30. The Petitioner also points to specific alleged flaws in the ER's heat shock, impingement, and entrainment analyses, *id.* at 32-52, and it argues that the ER's analysis of the close-cycle cooling alternative is incomplete. *Id.* at 52-54.

⁷⁵ "NRC Staff's Response to the Petition for Waiver of Commission Regulations Filed by CRORIP," dated January 22, 2008.

Staff Response to Riverkeeper Contention EC 1

The Staff does not oppose admission of this contention, to the extent that Riverkeeper has raised genuine issues of fact with respect to heat shock, impingement, and entrainment caused by the once-through cooling system. However, the contention fails to raise a genuine issue of material fact with respect to the closed-cycle cooling alternative. The ER clearly states that closed-cycle cooling “would reduce entrainment and impingement losses when compared with the existing once-through cooling system,” and states that closed-cycle cooling would “produce even fewer impacts upon the aquatic environment [than once-through cooling].” ER at 8-9, 8-10. Riverkeeper fails to address the adequacy of this statement, as required by § 2.309(f)(1)(vi). Furthermore, any discussion of the validity of the SPDES permit and issues pertaining to closed cycle cooling are beyond the authority of the NRC under the Clean Water Act as discussed in the Staff’s responses to New York AG Contentions 30 and 31, which responses are hereby incorporated by reference herein.

Riverkeeper Contention EC 2

Entergy’s analysis of severe accident mitigation alternatives (“SAMAs”) in its Environmental Report fails to satisfy NEPA, 42 U.S.C. § 4321-4380f, because its analysis of the baseline of severe accidents is incomplete, inaccurate, nonconservative, and lacking in the scientific rigor required by NEPA[.]

Riverkeeper Petition at 54. Riverkeeper contends, inter alia, that Entergy failed to consider the costs associated with spent fuel pool fires and intentional attacks on the reactors and spent fuel pools; that Entergy used a source term that has not been validated by the NRC; and that Entergy applied an inappropriate person-rem conversion factor. *Id.* at 61, 63 and 71-73. In support of its contention, Riverkeeper submitted the Declarations and Reports of Dr. Gordon Thompson and Dr. Edwin Lyman.

Staff Response to Riverkeeper Contention EC 2

The Staff opposes the admission of this contention. As Riverkeeper acknowledges, it is well-settled that spent fuel pool fires and intentional attacks on reactors and pools are out of scope and constitute impermissible challenges to NRC regulations.⁷⁶ As Riverkeeper notes, two petitions for rulemaking on this matter are pending. Riverkeeper Petition at 62. However, the pendency of a rulemaking does not change the outcome here. *Oconee*, 49 NRC at 345. Absent a waiver of the prohibition against such challenges, under 10 C.F.R. § 2.335, Riverkeeper's contention is inadmissible.

With respect to the source term Entergy employed, Riverkeeper asserts that the source term is based on radionuclide release fractions generated by the MAAP code – a proprietary industry code that has not been validated by the NRC.⁷⁷ Riverkeeper asserts that Entergy should have used source terms from NUREG-1465. Riverkeeper Petition at 68-69. But the use of one code rather than another does not raise an admissible contention unless some showing has been made that the code which was used is defective or that it was used in an inappropriate manner. *McGuire and Catawba*, 58 NRC at 240. Riverkeeper makes no such showing.

Similarly, Riverkeeper's contention regarding Entergy's use of a \$2,000 person/rem factor pits one set of calculations against another. Entergy's calculation of the cost equivalents

⁷⁶ *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC 13 (2007); *Turkey Point*, CLI-01-17, 54 NRC 3 (2001); *Duke Energy Corporation* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328 (1999).

⁷⁷ Although the MAAP computer code has not been formally reviewed and approved, it is widely used by utilities to quantify accident progression and source terms in the plant-specific Individual Plant Examinations and Probability Risk Assessments. See NUREG-1503, FSER Related to Certification of the ABWR Standard Design, at 19-55. Moreover, the MAAP code has been used by advanced reactor vendors to support design certification for all Advanced Light Water Reactors certified to date. See NUREG-1512, FSER Related to Certification of the AP600 Standard Design, pp. 19-61 and NUREG-1793, FSER Related to Certification of the AP1000 Standard Design, at 19-61.

of health effects is consistent with the guidance in NUREG-1530, "Reassessment of NRC's Dollar Per Person-Rem Conversion Factor Policy." In opposition, Riverkeeper proffers Dr. Lyman's calculations. This difference of opinion as to the calculation to be employed does not, by itself, generate an admissible contention absent a showing that the Applicant's calculation is flawed in some significant manner. *McGuire and Catawba*, 58 NRC at 240.

In sum, Riverkeeper Contention EC 2 is inadmissible as it constitutes an impermissible challenge to Commission regulations and raises issues that are not material.

Riverkeeper Contention EC 3

Entergy's ER fails to satisfy the requirements of NEPA, 42 U.S.C. § 4332 et seq., and NRC regulations implementing NEPA, including 10 C.F.R. § 51.45(c), and (e), because the ER does not adequately assess new and significant information regarding the environmental impacts of the radioactive water leaks from the Indian Point 1 and Indian Point 2 spent fuel pools on the groundwater and the Hudson River ecosystem.

Riverkeeper Petition at 74. Specifically, Riverkeeper asserts that Entergy's claim that the spent fuel pool at Indian Point Unit 2 is not leaking is unsupported by the facts, that Entergy failed to include any assessment of the impact of Strontium-90 contamination from Indian Point Unit 1 on Hudson River fish and shellfish, and that Entergy's claim that radionuclide contamination at the site is low is contradicted by the facts. *Id.* at 74-75.

Staff Response to Riverkeeper Contention EC 3

The Staff opposes the admission of Riverkeeper Contention EC 3, as it raises issues outside the scope of this proceeding and addresses an issue with respect to which the Commission has made generic findings. As such, it is an impermissible challenge to the Commission regulations at 10 C.F.R. § 51.53(c)(3) that embody those findings, and constitutes an impermissible attack on Commission regulations.

Riverkeeper relies, erroneously, on the assertion that Entergy submitted “new and significant” information regarding leaks in spent fuel pools at Indian Point Units 1 and 2 as its basis for asserting that this issue is within the scope of this proceeding. Riverkeeper Petition at 77-79. An applicant’s submission of “new and significant” information in an environmental report does not automatically open the door to a challenge that would otherwise be barred as out of scope. As the Licensing Board recently explained:

Even though a matter would normally fall within a Category 1 issue, ERs are also required to contain “any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware,” under 10 C.F.R. 51.53(c)(3)(iv). The Commission has, however, ruled that such information is not a proper subject for a contention, absent a waiver of the rule in 10 C.F.R. 51.53(c)(3)(i) that Category 1 issues need not be addressed in a license renewal. (Citations omitted.)

Carolina Power and Light Co. (Shearon Harris Nuclear Power Plant, Unit 1), LBP-07-11, 65 NRC 41, 64, n. 83 (2007), *see also Pilgrim*, LBP-06-23, 64 NRC at 288. Here, Riverkeeper has not shown that the information provided by the Applicant invalidates the conclusions of the GEIS, such that a waiver of the Commission’s regulations is warranted.

Riverkeeper Contention EC 3 is also inadmissible because it fails to demonstrate the existence of a genuine issue of fact to support its challenge to Entergy’s claim that groundwater contamination from the Unit 1 and Unit 2 spent fuel pools is low. Inasmuch as Riverkeeper has failed to put forward a basis for its assertion that contamination levels are high, Riverkeeper’s claim that Entergy failed to assess the impact of spent fuel pool contamination on Hudson River fish and shellfish, lacks a necessary factual predicate and is, thus, unsupported.

Riverkeeper has put forward no data in contravention of Entergy’s claim that only low concentrations of radionuclide contamination have been detected in groundwater at Indian Point. Riverkeeper argues that the concentrations are high, but it does so by taking the Entergy’s data regarding contamination levels out of their necessary and proper context. While

it is true that samples from monitoring wells showed levels of radionuclide contaminants in excess of the EPA's drinking levels, none of those monitoring wells are drinking wells; further, inasmuch as the groundwater at Indian Point is not a source for drinking water and is not associated with any drinking water pathway, EPA's limits do not apply.⁷⁸ Moreover, 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."⁷⁹ The report stated, "the current radioactive releases and associated public doses are below the NRC radioactivity release and public dose limits."⁸⁰ Thus, Riverkeeper has not supported its contention regarding contamination levels and has not demonstrated the existence of a genuine issue of fact.

Riverkeeper's claim that Entergy's ER should have included an evaluation of the impact of spent fuel pool contamination on Hudson River fish and shellfish hinges on its claim that there are high levels of contamination from the spent fuel pools. As Riverkeeper has put forward no evidence to support its claim that levels of contamination are high, its assertion that Entergy's ER should have examined the impacts of contamination on fish and shellfish is unsupported.

For the reasons stated above, Riverkeeper Contention EC 3 raises issues beyond the scope of this proceeding, constitutes an impermissible challenge to Commission regulations,

⁷⁸ See Indian Point Nuclear Generating Unit 2 – Special Inspection Report No. 05000247/2005011 (March 16, 2006), ADAMS Accession No. ML060750842, cited by Riverkeeper at Riverkeeper Petition at 81, footnote 114.

⁷⁹ *Id.* at viii.

⁸⁰ *Id.* at vii.

lacks basis, is unsupported by facts, and does not demonstrate the existence of a genuine issue for adjudication in this proceeding. The contention is, therefore, inadmissible.

Riverkeeper Contention TC 1

Inadequate Time Limited Aging Analyses and failure to demonstrate that aging will be managed safely

Contention: Entergy's LRA fails to satisfy 10 C.F.R. § 54.21(c)(1) in the following respects:

1. Tables 4.3-13 ["IP2 Cumulative Usage Factors for NUREG/CR-6260 Limiting Locations"] and 4.3-14 ["IP3 Cumulative Usage Factors for NUREG/CR-6260 Limiting Locations"] identify four representative reactor coolant components for which Entergy's evaluation of Time Limited Aging Analyses ("TLAAs") is facially non-compliant with the standard of 10 C.F.R. § 54.21 (c)(i)-(ii) for avoiding a demonstration, under 10 C.F.R. § 54.21(c)(iii), that it will adequately manage the effects of aging on the intended functions of the components during the license renewal term. For these four components - pressurizer surge line piping (IP2 & IP3), the RCS piping charging system nozzle (IP2), and pressurizer surge line nozzles (IP3) - the environmentally adjusted cumulative usage factor ("CUF") estimated by Entergy exceeds the regulatory threshold for submitting an aging management program. Yet, Entergy has failed to broaden its TLAAs analysis beyond the scope of the representative components identified in Tables 4.3-13 and 4.3-14 to identify other components whose CUF may be greater than one; nor has it submitted any demonstration that it will adequately manage the aging of components with a CUF greater than one. Therefore Entergy's LRA does not satisfy 10 C.F.R. §§ 54.21 (c) or (c)(iii).

2. Entergy's list of components with CUFs of less than one in Tables 4.3-13 and 4.3-14 is incomplete, because Entergy's methods and assumptions for identifying those components are unrealistic and inadequate.

3. For a number of other components subject to the license renewal regulations, which are listed in Tables 4.3-3 through 4.3-12, Entergy has also failed to perform complete TLAAs. The TLAAs for these components are incomplete because they omit consideration of the exacerbating effects of environmental conditions on the fatigue of metal components. Therefore Entergy has failed to satisfy 10 C.F.R. § 54.21(c)(1)(i)-(ii). Nor has Entergy

submitted an aging management program for these components, as required by 10 C.F.R. § 54.21(c)(1)(iii).

Riverkeeper Petition at 7. Riverkeeper offers the support of Dr. Joram Hopenfeld, a mechanical engineer with a doctorate in engineering. *Id.* at 8; Declaration of Dr. Joram Hopenfeld in Support of Riverkeeper's Contentions TC 1 and TC 2.

For Contention TC 1.1, Riverkeeper cites 10 C.F.R. § 54.21(c)(1)(i-iii), in asserting that an aging management plan must demonstrate that the application will manage the effects of aging, and an applicant cannot merely summarize options for future plans. Riverkeeper at 9 (*citing Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 186 (2006) (admitting contention challenging insufficiency of license renewal applicant's description of program for management of fatigue)*). Riverkeeper states that for components with CUF greater than 1, Entergy will choose among three options: (a) "[r]efine" the fatigue analysis to determine CUFs less than one, (b) "[m]anage" the effects of aging by an inspection program, or (c) "[r]epair or replace the affected locations before exceeding a CUF of 1.0." Riverkeeper at 12 (*citing LRA at 4.3-22*). In Riverkeeper's view, these options are unacceptable because they do not meet regulations or are vague, *id.* at 12-13, and before receiving a renewed license, Entergy must submit a list of all components with CUF greater than one and an associated AMP. *Id.* at 13.

For Contention TC 1.2, Riverkeeper states that its expert believes that, based on data in NUREG/CR-6909, Effect of LWR Coolant Environment on Fatigue Life of Reactor Materials, Final Report (February 2007), Entergy used an unrealistically low number of 2.45 instead of a more-realistic value of 17 for an environmental correction factor ("Fen"). *Id.* at 14. However, Riverkeeper does not claim that it is aware of the actual "Fen" used. *See Id.* Further, it asserts that Entergy used the 40-year CUF but the regulations and regulatory guides required Entergy to project the number of cycles to 60 years. *Id.* (*citing 10 C.F.R. § 54.21(c)(1)(ii)*), Electric Power

Research Institute, Materials Reliability Program: Guidelines for Addressing Fatigue Environmental Effects in a License Renewal Application, Rev. 1 ("MRP-47"), at 3-4 (2005)). In its view, Entergy should have substituted generic CUF data values for locations where plant-specific values were not available; and LRA Tables 4.3-13 and -14 are inaccurate because incorrect methods and assumptions were used. *Id.*

For Contention TC 1.3, Riverkeeper states that Entergy failed to expand the scope of TLAAs for which it considered environmental effects on fatigue even though it was required to do so because it had identified a CUF greater than one. *Id.* at 14-15. In its view, applying the correct FEN to reflect the harsh environment in which these components operate would show that the CUF for some components exceed 8.5. *Id.* at 15.

Staff Response to Riverkeeper Contention TC 1

The Staff does not oppose the admission of this contention, limited to certain issues. The issue of aging, including CUFs for components or sub-components, is within the scope of license renewal and is discussed in the application. *E.g.* LRA at 4.3-1. The Staff does not oppose admission of TC 1.1, to the extent that it challenges whether the application has demonstrated the methodology it will use to manage the effects of aging or broaden its TLAAs for components with a CUF greater than one. Further, the Staff does not oppose the admission of TC-1 to the extent that it contends the Applicant's methods and assumptions used in calculating the CUF may be incorrect.

However the Staff opposes the admission of TC 1.2 to the extent that it claims that the lists of components (*e.g.* vessel shell and lower head, RHR Class 1 piping) in Tables 4.3-13 and 4.3-14 are incomplete and that other components need to be considered beyond those listed. In this regard, it has failed to provide sufficient basis to support its assertions. Further, the Staff opposes the admission of TC 1.3, because Riverkeeper has failed to show why Entergy was required to expand the scope of locations (listed in the LRA Tables 4.3-3 through 4.3-12), for

which environmental corrections factor (“FEN”) must be used in calculating metal fatigue. In this regard, the section of NUREG-1801 cited by Riverkeeper does not support the application of FENs to the additional items listed by Riverkeeper. Therefore, Riverkeeper has not adequately specified its dispute with the application, and this portion of the contention is inadmissible. 10 C.F.R. § 2.309(f)(1)(vi).

Riverkeeper Contention TC 2- FLOW ACCELERATED CORROSION (FAC)

Riverkeeper contends that Entergy's program for management of Flow Accelerated Corrosion (FAC) fails to comply with 10 C.F.R. § 54.21(a) (3)'s requirement that: For each structure and component identified in this contention fails to demonstrate that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the CLB for the period of extended operation.

Riverkeeper Petition at 15. Riverkeeper alleges that Entergy fails to follow the guidance of NUREG-1800, which requires that an aging management program, including a FAC program for life extension, must address each of the following elements: (1) Scope, (2) Preventative actions, (3) Parameters monitored or inspected, (4) Detection of aging effects, (5) Trending, (6) Acceptance criteria, (7) Corrective actions, (8) Confirmation processes, (9) Administrative processes, (10) Operating experience. Riverkeeper further alleges that Entergy's program for management of FAC is deficient because it has not demonstrated that components in the Indian Point nuclear power plant that are within the scope of the license renewal rule and are vulnerable to FAC will be adequately inspected and maintained during the license renewal term. In particular, Riverkeeper asserts that Entergy's program for management of FAC is deficient because it relies on the computer based program known as CHECWORKS⁸¹, without sufficient

⁸¹ The Staff notes that a contention based on the alleged inadequacy of CHECWORKS has been admitted in the Vermont Yankee LRA, and Dr. Hopenfeld is the Petitioner's expert. See *Entergy Nuclear* (continued. . .)

benchmarking of the IP operating parameters. In addition, Riverkeeper also asserts that Entergy's license renewal application fails to specify the method and frequency of component inspections or criteria for component repair or replacement. Petition at 16. Riverkeeper attempts to support its contention with its expert Dr. Joram Hopenfeld's Declaration (November 29, 2007), in which he states that he backs all allegations in the petition.

Staff Response to Riverkeeper Contention TC 2

The Staff opposes the admission of this contention. Riverkeeper's Contention TC 2 is unduly vague because it does not identify any particular system or component of concern. Riverkeeper makes vague references to pipe thinning events at other plants such as Hope Creek, Peach Bottom, etc., but makes no attempt to identify any particular systems or components that are affected in a significant way by extended power uprate ("EPU") conditions or the period of extended operation. Without any identification of systems and components alleged to be inadequately managed, Riverkeeper 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, Riverkeeper fails to demonstrate that its concerns about CHECWORKS have any basis or would materially affect the adequacy of the FAC program at IP. It is apparent that neither Riverkeeper nor its expert know how CHECWORKS is used in this FAC program, because they only infer its use from the Application. Riverkeeper concedes that consistent with EPRI guidelines the Entergy FAC program is based largely on CHECWORKS, which is used in all operating nuclear plants to record and predict timing and locations of wall thinning.

(. . .continued)

Vermont Yankee, L.L.C., and Entergy Nuclear Operations, (Vermont Yankee Nuclear Power Stations), (Aug. 10, 2007) (unpublished order) at 6-8.

Riverkeeper Petition at 19. CHECWORKS is a tool to identify the areas highly susceptible to FAC, which is then used with trend data from actual inspections, operating experience and engineering judgment; Riverkeeper does not provide any real basis indicating that CHECWORKS cannot be used after an EPU and into the license renewal period, other than Dr. Hopenfeld's bald assertion that "[a] minimum of 10 - 15 years would be a more appropriate period of benchmarking empirical FAC models (Petition at 21)."⁸² However, Dr. Hopenfeld provides absolutely no empirical proof, data or research to back his statements; therefore his fail to provide an adequate 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. Riverkeeper fails to show any reason to disturb GALL's conclusions.

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

⁸² In October 2004 and March 2005, IP2 and IP3 were granted a power increase of 3.26 % and 4.85% respectively; while his concerns are unclear, presumably, Dr. Hopenfeld argues that the operating history since implementation of the EPU is not enough time for benchmarking.

indicates that the FAC program relies on the foregoing EPRI guidelines and that CHECWORKS is acceptable because it provides a bounding analysis in which an inspection schedule based on the results of a predictive code like CHECWORKS provides reasonable assurance that structural integrity will be maintained between inspections. See GALL Report at XI M-61 to XI M-62. Dr. Hopenfeld's unsupported opinions do not provide an adequate basis to question the use of CHECWORKS. Therefore, the contention does not raise a genuine dispute concerning the LRA and should be rejected.

Furthermore, Riverkeeper took statements out of context from an ACRS proceeding to support its claim. In this regard, Riverkeeper took the ACRS hearing out of context when it quoted Dr. F. Peter Ford from the ACRS hearing transcript of January 26, 2005: (ML050400613).⁸³

Unsupported conclusory assertions, even by an expert, cannot support the admission of a proffered contention. *Calvert Cliffs*, CLI-98-14, *Fansteel*, CLI-03-13. Moreover, CHECWORKS has been in use by the industry since 1993. Even if Dr. Hopenfeld were correct in his opinion that it takes 10-15 years of accumulated data before CHECWORKS can be used reliably, he fails to show any reason to believe sufficient experience has not been gained by now; further, his unsupported opinion would invalidate the studies performed by every plant that has been using CHECWORKS after an uprate in the last ten to fifteen years. Further, neither Dr. Hopenfeld nor Riverkeeper address the conservatism in CHECWORKS. NUREG-1801 states:

⁸³ This issue is addressed and explained later and also on page 200 of this transcript, So all those points are already corrected. Ideally, if they were ideal, they would lie in the 45 degree line, the middle line". Advisory Committee on Reactor Safeguards Thermal Hydraulic Phenomena Subcommittee, 198-200 (Jan. 26, 2005) (ML050400613).

CHECWORKS is acceptable because it provides a bounding analysis for FAC. CHECWORKS was developed and benchmarked using data obtained from many plants. NUREG-1801 at XI M-61 - M-62 (emphasis added).

In sum, Riverkeeper's purported basis for its contention is merely an unsupported assertion that CHECWORKS cannot be used without 15 years of data, but this statement does not raise genuine material dispute because it ignores how CHECWORKS is used at Indian Point, it ignores the specific wear rates projected in the EPU proceeding, and it ignores the increased inspection activities that are being implemented at Indian Point. Therefore, Riverkeeper's proposed Contention TC 2 does not raise a genuine dispute of material fact, and should be rejected.

6. Town of Cortlandt

Cortlandt Contention 1

The License Renewal Application ("LRA") does not provide sufficient detailed information regarding technical and safety issues as required by 10 C.F.R. Part 54.

Cortlandt Petition at 2. In support of this contention, Cortlandt asserts that the Applicant's LRA has not met the threshold of providing explicit specific technical information as required under 10 C.F.R. Part 54 with respect to the Equipment Environmental Qualification Program, and the Flow-accelerated Corrosion ("FAC") Program. Cortlandt asserts that the Applicant's LRA does not include certain threshold technical requirements, but merely makes non-specific conclusory statements. Further, Cortlandt asserts that both 10 C.F.R. Part 54 and NUREG-1800 require that a specific and particularized program define component and system scope, inspection criteria, methodology, frequency and remediation commitments when acceptance criteria for FAC inspections are not met, and that the LRA fails to provide required information. Cortlandt Petition at 2.

Staff Response to Cortlandt Contention 1

Cortlandt's Contention 1 is inadmissible as it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309. Petitioner's reliance on generic questions and references to the regulations do not provide sufficient information to show that there are material issues of fact in dispute. Petitioner's asserted bases for this contention lack sufficient facts and contain no supporting expert opinion to satisfy 10 C.F.R. § 2.309(f)(1)(v). Throughout its discussion of the contention, Petitioner raises numerous vague and unconnected issues but does not provide legal support as to why the application is inadequate or why those issues must be addressed in this proceeding. It is impermissible for Petitioner to rely on generalized suspicions and vague references to alleged issues at Indian Point and equally unparticularized portions of the LRA for providing a factual basis. 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.'"⁸⁴ Further, if a petitioner neglects to provide the requisite support for its contentions, the Board should not make assumptions of fact that favor the petitioner, or supply information that is lacking.⁸⁵

Pursuant to 10 C.F.R. § 2.309(f)(1)(v); and *Millstone*, CLI-01-24, 54 NRC at 363, Cortlandt's brief explanation of its bases for proposed Contention 1 does not provide a clear description of the facts relied upon in support of the contention. Indeed, it is unclear exactly what bases the Petitioner wishes to rely upon. Therefore Cortlandt Contention 1 should be rejected.

⁸⁴ *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)).

⁸⁵ *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001).

Cortlandt Contention 2

Leak-before-Break analysis is unreliable for welds associated with high energy line piping containing certain alloys at Indian Point Energy Center ("IPEC").

Cortlandt Petition at 3. To support this contention, Cortlandt claims that the Applicant's Leak-before-Break ("LBB") analysis in its LRA is unreliable and does not provide an adequate aging management plan. *Id.* Cortlandt further contends that the LBB is an analysis procedure with a limited scope of applicability and requires NRC review and approval. *Id.*

Cortlandt further refers to various news articles attempting to support a claim of serious piping issues at the facility, such as "Faulty valves trigger shutdown of Indian Point 2. Drainage problem developed with discharge valves in a 10,000-gallon tank of nonradioactive water", "A 1-inch steel alloy pipe that leaked non-radiated steam and water in the containment building that houses the nuclear reactor is repaired", and "Indian Point 2 interrupts power production due to steam generator problem." as evidence to support Petitioner's contention. *Id.* at 4. Cortlandt further alleges that the locations of piping systems that are susceptible to stress corrosion may not qualify for LBB relief, and contends that the LRA does not respond to the potential safety threat of stress corrosion of weld alloys. *Id.* at 5. Petitioner requests that the NRC require the Applicant to include in its LRA a reliable and adequate Aging Management Plan regarding piping and welds, so that public health and safety are not at risk if the NRC renews the license for an additional 20 years. *Id.* at 5. Cortlandt offers no supporting experts or other documentation to support this contention.

Staff Response to Cortlandt Contention 2

The Staff opposes the admission of this contention on the grounds that 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 as required by 10 C.F.R. §§ 2.309(f)(1)(iii), (iv), and (vi); and it is not supported by bases that satisfy the pleading requirements of 10 C.F.R. § 2.309 and is vague.⁸⁶ 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.’”⁸⁷

The Contention is incorrect in its assertions, as the LRA does not request approval of the LBB, but discusses LBB as a TLAA (See LRA, ¶ 4.7.2 “Leak before Break”), IAW; 10 C.F.R. § 54.21. The LRA states that these analyses consider the thermal aging of the CASS piping and fatigue transients that drive flaw growth over the operating life of the plant. Because these two analysis considerations could be influenced by time, LBB analyses are identified as potential TLAA. Further, the LRA indicates that the structural design of IP2 considered and protected against the effect of postulated reactor coolant loop pipe ruptures; the LBB analyses have been documented in WCAP-10977, WCAP-10977 Supplement 1, and WCAP-10931; and the time-related assumptions in the analyses include the thermal aging of cast austenitic stainless steel and the fatigue crack growth analysis. Further, the LRA indicates that the structural design of IP3 considered and protected against the effect of postulated reactor coolant loop pipe ruptures; the LBB analyses have been documented in Appendix A of WCAP-8228; and the LRA evaluated this consideration and concluded that it does not have a material property time-dependency and this aspect is not considered TLAA. See LRA, ¶ 4.7.2.

⁸⁶ 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).

⁸⁷ *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)).

Further, while Cortlandt refers to various piping cited in recent news reports, the Applicant has addressed TLAAS that are related to LBB, and Cortlandt has not identified any flaws with the Applicant's analysis. Cortlandt, further alleges that the locations of piping systems that are susceptible to stress corrosion cracking (SCC) may not qualify for LBB relief, and contends that the Applicant's LRA does not respond to the potential safety threat of stress corrosion of weld alloys; however, to the extent that Cortlandt appears to be challenging the applicability of LBB, this is outside the scope of license renewal proceeding.

In sum, the contention fails to demonstrate a deficiency in the application and fails to show that this issue is material to a finding the NRC must make to support a decision regarding the license renewal application. As has previously been noted in other NRC proceedings,⁸⁸ a petitioner must, in addition to demonstrating standing, submit a contention meeting the requirements of 10 C.F.R. § 2.309(f)(1). The failure of a contention to meet any of the requirements of § 2.309(f)(1) is grounds for its dismissal.⁸⁹ Here, contrary to the requirement of 10 C.F.R. § 2.309(f)(1)(vi), Cortlandt fails to "provide sufficient information to show . . . a genuine dispute . . . with the Applicant . . . on a material issue of law or fact." The Commission has stated that a 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.⁹⁰ In accordance

⁸⁸ 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).

⁸⁹ 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).

⁹⁰ 54 Fed. Reg. at 33,170; *Millstone*, CLI-01-24, 54 NRC at 358.
(continued. . .)

with 10 C.F.R. § 2.309(f)(1)(v), Cortlandt has 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.⁹¹ 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.⁹²

Cortlandt has failed to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(ii),(iii),(iv),(v), and (vi). The contention should therefore be rejected.

Cortlandt Contention 3

Applicant's LRA does not specify 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.

Cortlandt Petition at 4. Cortlandt alleges that the Applicant's LRA does not specify an Aging Management Plan to monitor and maintain all structures, systems, and components associated with the storage, control, and maintenance of spent fuel in a safe condition, in a manner

(. . .continued)

⁹¹ See *Texas Utils. Elec. Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

⁹² See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 & n.12 (1990).

sufficient to provide reasonable assurance that such structures, systems, and components are capable of fulfilling their intended functions, as required in 10 C.F.R. § 50.65. Petitioner further alleges that tritium contamination has been found in numerous monitoring wells at IPEC; the condition of the spent fuel pool at Indian Point Unit 2 is known to be compromised; the LRA does not propose an Aging Management Plan that adequately addresses the leak or the intended function of the spent fuel pool; the spent fuel pool's 30-year old concrete, rebar and steel liner are currently faulty and likely cannot be maintained for an additional 20 years; ongoing and unmonitored leaks of liquid radioactive effluents, including tritium, strontium-90, and cesium-36, are leaking into the groundwater and into the Hudson River, although the duration, extent, flow paths, and/or source of these leaks are largely unknown. Cortlandt Petition at 6.

Cortlandt proffers no evidence or expert witness opinion to support its contention.

Staff Response to Cortlandt Contention 3

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 on a material issue of law or fact in accordance with 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 is overly vague. Furthermore, the asserted bases for the contention lack sufficient facts and contain no supporting expert opinion, needed to satisfy 10 C.F.R. § 2.309(f)(1)(v). 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.’”⁹³

⁹³ *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)).

Cortlandt's main contention that the Applicant does not specify an aging management program for the spent fuel pools at Units 2 and 3 is totally erroneous. LRA Table 2.4-3 lists the spent fuel pool components that are subject to an aging management review ("AMR"). LRA Table 3.5.2-3 identifies the appropriate aging management programs for each spent fuel pool component type by material, and environment combination. According to the Applicant's LRA Sections 2.4.3 and 3.5.2, the IP2 and IP3 fuel storage buildings, spent fuel pools (concrete structure), fuel pool liner, and gate are within the scope of license renewal and are subject to an aging management review.

Furthermore, in accordance with 10 CFR § 2.309(f)(1)(v), the Petitioner is required 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 the Petitioner intends to rely to establish those facts or expert opinion. Other than providing a general citation to the LRA and alluding to the status and condition of the leaking spent fuel pools, the Petitioner proffers no evidence or witness testimony to support its contention, and it therefore failed to identify the bases on which the petitioner intends to rely. *Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2)*, LBP-94-22, 40 NRC 37, 39 (1994).

Therefore, for the reasons stated above, this contention should be rejected.

Cortlandt Contention Misc-1

Impact to the local economy if Indian Point Units 2 and 3 are not re-licensed

Cortlandt Petition at 7. Cortlandt's contention states that the "Applicant must consider the potential effect on the economy" if Entergy's license is not renewed, id., because "the effect on the community will be severe if NRC does not renew Applicant's license." *Id.* at 8. Cortlandt

also argues that the NRC should consider the economic impact if it denied Entergy's license renewal application. *Id.*

Staff Response to Cortlandt Contention Misc-1

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

Under 10 C.F.R. § 51.45(c), an environmental report prepared pursuant to § 51.53(c) is not required to discuss economic costs or benefits of license renewal unless it is necessary to determine inclusion of an alternative or it is relevant to mitigation. A contention arguing, without more, that failure to renew an operating license will result in detrimental impacts to the community is beyond the scope of license renewal. See, e.g., *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), Memorandum and Order (Denying the New York Affordable Reliable Electricity Alliance's Petition to Intervene) (Dec. 12, 2007) (denying New York AREA proposed contention arguing severe economic impacts because, among other things, the contention is beyond the scope of the license renewal proceeding).

In sum, Entergy need not address economic impacts in its ER beyond those required under § 51.53(c) and Table B-1 of Part 51. Cortlandt raises an issue that is beyond the scope of license renewal and it should therefore be rejected.

Cortlandt Contention Misc-2

The Decommissioning Trust Fund is inadequate.

Cortlandt Petition at 8. In this contention, the Town of Cortlandt asserts that Entergy's LRA is inadequate because it fails to provide an adequate decommissioning plan that addresses alleged radioactive leakage discovered in 2005 or the storage of an additional 20 years of radioactive waste onsite. *Id.* at 8-9.

Staff Response to Cortlandt Contention Misc-2

The Staff opposes the admission of this contention. The cost of decommissioning is a current operating issue, as “the impact of license renewal on decommissioning cost is not a consideration in . . . the decision to renew a license.” GEIS, NUREG-1437 Vol. 1, Chapter 7, “Decommissioning.” 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 64,968-9. Therefore, this contention should not be admitted.

Further, Cortlandt’s claim that the decommissioning trust fund cost requirements should be increased due to the storage of, and cost of storing, spent nuclear fuel, Cortlandt Petition at 9, constitutes an impermissible challenge to the GEIS. 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 this contention or any of the bases for the contention are within scope of license renewal, the contention should not be admitted.

Cortlandt Contention Misc-3

Applicant’s LRA fails to address the catastrophic consequences of a potential terrorist attack on the aging Indian Point Nuclear Reactors.

Cortlandt Petition at 10. Cortlandt relies on the decision in *San Luis Obispo Mothers for Peace v. NRC* by the U.S. Court of Appeals for the Ninth Circuit, in arguing that the NRC should require Entergy to consider the environmental impact of a terrorist attack on Indian Point. *Id.* at 10-11. Cortlandt also argues that the LRA should discuss the potential significant impacts of a terrorist attack because of the existence of allegedly new and significant information. *See id.*

Staff Response to Cortlandt Contention Misc-3

The Staff opposes admission of this contention on the grounds that NEPA does not require the NRC to consider the impact of malevolent attacks, as described in the Staff's response to Clearwater Contention EC 6. In order to avoid unnecessary repetition, the Staff incorporates that discussion by reference herein.

7. Westchester County

Westchester County has not proffered a contention, stating instead that it wishes to adopt the contentions proffered by the State of New York. Westchester Petition at 1-2.

Staff Response to Westchester County

Westchester fails to meet the intervention requirements of § 2.309, because it does not proffer a contention. Pursuant to § 2.309(a), a person desiring to participate in a proceeding must file a written request for a hearing or petition to intervene, and “a specification of the contentions which the person seeks to have litigated.” 10 C.F.R. § 2.309(a). Moreover, the regulation provides that the Licensing Board will grant the petition if the petitioner demonstrates standing under § 2.309(d) and “has proposed at least one admissible contention that meets the requirements of [§ 2.309(f)].” *Id.* (emphasis added).

Here, the Petitioner “co-sponsors [or] adopts” the contentions advanced by the State of New York, but fails to proffer a single admissible contention of its own. There is no need to

evaluate the sufficiency of the adoption proposal, because Westchester County's petition to intervene fails on its face to meet the requirements of 10 C.F.R. § 2.309.⁹⁴

III. Other Requests for Relief

New York does not specifically request a Subpart G hearing, but instead asserts that states have an inherent right to interrogate witnesses. NYAG Petition at 19-20. As demonstrated below, this statement does not satisfy regulatory requirements for a Subpart G hearing; therefore, New York'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,⁹⁵ 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 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,

⁹⁴ The fact that Westchester County fails to meet the intervention requirements in § 2.309 does not preclude the petitioner from participating as an interested governmental entity under 10 C.F.R. § 2.315(c).

⁹⁵ 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.*

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.

New York does not request that the Board apply the rules of Subpart G to this proceeding, and it therefore does not demonstrate that resolution of any contention necessitates use of Subpart G procedures, as required by NRC rules. See 10 C.F.R. § 2.309(g). Instead, the State claims that it “should not be required . . . to separately demonstrate that the provisions of Subpart G should apply to any Contentions which are admitted.” NYAG Petition at 20 n.6.

The basis for this claim appears to be rooted in New York’s suggestion that the Atomic Energy Act grants states an automatic right to interrogate witnesses, presumably as embodied in the Subpart G hearing procedures. NYAG Petition at 20. In its argument, however, New York displays a thorough misunderstanding of the NRC’s hearing procedures. The State claims that § 2.315(c) gives states the right to offer evidence and interrogate witnesses “in those cases where a hearing is held.” *Id.* This interpretation ignores the plain language of that section, which clearly states that it applies to a state “which has not been admitted as a party under § 2.309” 10 C.F.R. § 2.315(c) (emphasis added). New York seeks to be admitted as a party, and if it is in fact admitted, then the provisions of § 2.315(c) will not apply to it.

New York contends that the statutory “right” to interrogate witnesses applies “to all applications.” NYAG Petition at 20. In fact, no such absolute right exists. The AEA provides that NRC “shall afford reasonable opportunity for [States] to offer evidence, interrogate witnesses, and advise the Commission as to the application.” 42 U.S.C. § 2021(l) (emphasis

added). This opportunity is inherent in proceedings using Subpart G procedures, and, in Subpart L proceedings is governed by the provisions of 10 C.F.R. § 2.1204(b), which allows the presiding officer to permit cross-examination as needed “to develop an adequate record.” 10 C.F.R. § 2.1204(b)(3). See also *Vermont Yankee*, LBP-04-31, 60 NRC at 708-09.

In short, New York has not demonstrated the need for a Subpart G proceeding, and has not established any bases, at this time, to support its request that it be allowed to conduct cross-examination. Thus, New York’s request for such procedures to be adopted should be rejected at this time.

CONCLUSION

For the reasons set forth above, the NRC Staff respectfully submits that Connecticut, CRORIP and Nancy Burton, Clearwater, Town of Cortlandt, and Westchester County have failed to submit at least one admissible contention, and their petitions for leave to intervene should therefore be denied. The Staff further submits that the State of New York and Riverkeeper, Inc. have demonstrated standing to intervene and have proffered at least one

admissible contention. The Staff respectfully submits that the Petitioners' contentions should be found to be admissible in the manner and 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) 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, 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

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

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

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

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

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: ZXK1@nrc.gov

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 (NYCDEC)
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@gw.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: driese1@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