UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Lawrence G. McDade, Chairman
Dr. Kaye D. Lathrop
Dr. Richard E. Wardwell

In the Matter of	Docket Nos. 50-0247-LR and 50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.	ASLBP No. 07-858-03-LR-BD01
(Indian Point Nuclear Generating Units 2 and 3)	July 6, 2011

MEMORANDUM AND ORDER

(Ruling on Pending Motions for Leave to File New and Amended Contentions)

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INTRODUCTION

Before the Board are several motions for leave to file new or amended contentions in response to Amendment 9 to Applicant, Entergy Nuclear Operations, Inc.'s (Entergy) License Renewal Application (LRA)[1] and the NRC Staff's Final Supplemental Environmental Impact Statement (FSEIS).[2] Some of these motions entail waiver petitions, exemption requests, and/or motions to strike. We first address the standards for contention admissibility and then separately discuss each proposed contention and its associated motions.

[1] See Letter from Fred Dacimo, Vice President, License Renewal, Entergy Nuclear Northeast, to U.S. Nuclear Regulatory Commission, NL-10-063, Attach. 1, Amendment 9 to License Renewal Application – Reactor Vessel Internals Program (July 14, 2010) (ADAMS Accession No. ML102010102) [hereinafter LRA amend. 9]; see also Letter from Kathryn M. Sutton and Paul M. Bessette, Counsel for Entergy Nuclear Operations, Inc., to Atomic Safety and Licensing Board (July 15, 2010).

[2] The NRC Staff issued the FSEIS on December 3, 2010. See Letter from Sherwin E. Turk, Counsel for NRC Staff, to Atomic Safety and Licensing Board (Dec. 3, 2010); Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437, Supplement 38, Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Final Report, NUREG-1437 (Dec. 2010) [hereinafter FSEIS].

I. LEGAL STANDARDS GOVERNING NEW/AMENDED CONTENTION ADMISSIBILITY

Consistent with the provisions in 10 C.F.R. § 2.309(f)(2), a timely new or amended contention must be based on information that previously was unavailable, arise from information that is materially different from previous information, and be filed in a timely fashion.[3] Our July 1, 2010 Scheduling Order generally provided for a thirty-day window within which to file new or amended contentions based on new information.[4] The opening of this window is the date that the materially different new information becomes reasonably available to the participants in this proceeding.[5]

If a new or amended contention is not timely filed, its proponent must meet the eight-factor balancing test of 10 C.F.R. § 2.309(c)(1). Of the eight factors identified in Section 2.309(c)(1), the Commission has deemed the "good cause" factor the most important.[6] In addition to Section 2.309(f)(2) or (c)(1)'s standards, a new or amended contention must also satisfy the general contention admissibility requirements of 10 C.F.R. § 2.309(f)(1).[7]

In our July 1, 2010 Scheduling Order, we stated that if a party moving for admission of a new or amended contention is uncertain whether Section 2.309(c)(1) (for nontimely filed contentions) or Section 2.309(f)(2) (for timely filed contentions) applies, it may file pursuant to both sections.[8]

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[3] Id. § 2.309(f)(2)(i)-(iii).

[4] Licensing Board Scheduling Order (July 1, 2010) at para. F.2 (unpublished) [hereinafter July 1, 2010 Scheduling Order].

[5] Cf. Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC __, __-__ (slip op. at 17-18) (Sept. 30, 2010).

[6] AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-07, 69 NRC 235, 261 (2009).

[7] See id.; Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-05, 69 NRC 115, 120 n.21 (2009).

[8] See July 1, 2010 Scheduling Order at para. F.2.

NRC regulations dictate that contentions arising pursuant to the National Environmental Policy Act (NEPA) must initially be "based on the applicant's environmental report [ER]."[9] If admitted, those contentions may be amended, or new contentions proffered, as long as "there are data or conclusions in the NRC draft or final environmental impact statement . . . or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's documents."[10] In our December 27, 2010 Order, we stated that "new or amended contentions that are properly based on significantly new data or conclusions in the FSEIS will be considered timely if filed on or before February 3, 2011."[11]

II. NYS-12C

A. Background

Before addressing the admissibility of the State of New York's (New York's) Contention 12-C (NYS-12C), the history of earlier iterations of this contention is summarized as follows. We first admitted NYS-12, which contested the accuracy of Entergy's severe accident mitigation alternatives (SAMA) analysis's estimation of decontamination and clean up costs in the New York City metropolitan area from a severe nuclear accident at the Indian Point Energy Center (IPEC). More specifically, NYS-12 alleged that the ER's use of the MACCS2 computer code effectively underestimated the cost of a severe accident.[12] We then admitted NYS-12A, which raised a comparable dispute with the adequacy of the NRC Staff's Draft Supplemental

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[9] 10 C.F.R. § 2.309(f)(2).

[10] Id. (emphasis added).

[11] Licensing Board Order (Granting Intervenor's Unopposed Joint Motion for an Extension of Time) (Dec. 27, 2010) at 2 (unpublished). Because the FSEIS was issued on December 3, 2010, new or amended contentions would have been due by January 3, 2011 without the extension we granted. See id. at 1.

[12] LBP-08-13, 68 NRC 43, 100-02 (2008).

Environmental Impact Statement (DSEIS) on this topic.[13] Subsequently, we admitted NYS-12B, which raised a similar challenge to Entergy's December 2009 SAMA Reanalysis.[14]

B. New York Motion

NYS-12C, filed on February 3, 2011,[15] purports to update New York's earlier claims against Entergy's ER and the NRC Staff's DSEIS by applying them to the FSEIS.[16] Specifically, New York faults the FSEIS's reliance on the MACCS2 code because of that model's assumption that a severe accident would entail the release of large-sized (rather than small-sized) radionuclide particles, which results in an underestimation of the cleanup costs of a severe nuclear accident in the region around Indian Point.[17] New York states that the FSEIS incorrectly "fails to scale up the [1996 Sandia Study] decontamination cost data for a high density urban

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[13] Licensing Board Order (Ruling on New York State's New and Amended Contentions) (June 16, 2009) at 3-4 (unpublished) [hereinafter June 16, 2009 Licensing Board Order].

[14] LBP-10-13, 71 NRC __, __ (slip op. at 9-10) (June 30, 2010).

[15] State of New York's Motion for Leave to File New and Amended Contention-12C Concerning NRC Staff's December 2010 Final Supplemental Environmental Impact Statement and the Underestimation of Decontamination and Clean Up Costs Associated with a Severe Accident in the New York Metropolitan Area (Feb. 3, 2011) [hereinafter New York Motion for Leave to File NYS-12C]; State of New York New Contention-12C Concerning NRC Staff's December 2010 Final Environmental Impact Statement and the Underestimation of Decontamination and Clean Up Costs Associated with a Severe Accident in the New York Metropolitan Area (Feb. 3, 2011) [hereinafter NYS-12C]. On March 7, 2011, Entergy and the NRC Staff each filed Answers opposing in part admission of NYS-12C. Applicant's Answer to New York State's Amended Contention 12C Concerning Severe Accident Mitigation Alternatives Analysis (Mar. 7, 2011) [hereinafter Entergy Answer to NYS-12C]; NRC Staff's Answer to State of New York Contention 12-C Concerning the Final SEIS Evaluation of Decontamination and Clean Up Costs in a Severe Accident (Mar. 7, 2011) [hereinafter NRC Staff Answer to NYS-12C]. On March 18, 2011, New York filed its Combined Reply to Entergy's and the NRC Staff's Answers. State of New York's Combined Reply to NRC Staff and Entergy's Answers to Contention 12-C Concerning NRC Staff's December 2010 Final Environmental Impact Statement and the Underestimation of Decontamination and Clean Up Costs Associated with a Severe Reactor Accident in the New York Metropolitan Area (Mar. 18, 2011) [hereinafter New York NYS-12C Reply].

[16] NYS-12C at 2-3.

[17] Id. at 4-7.

area such as New York City and its metropolitan area."[18] In support of this claim, New York relies on information supplied in NYS-12/12A/12B as well as a report dated February 2011 and signed by its proffered expert, David Chanin, who incorporates other reports into his position regarding the FSEIS that the NRC Staff needs to take account property values around Indian Point and to express those values in present and future values.[19] New York adds challenges to the FSEIS's discussions of severe accidents to its claims against Entergy's ER and the NRC Staff's DSEIS, concluding that the FSEIS's underestimation of cleanup costs violates the NRC Staff's duties under NEPA, the Administrative Procedure Act (APA), and NRC and Council on Environmental Quality (CEQ) regulations.[20] Entergy and the NRC Staff do not oppose the admission of NYS-12C insofar as it seeks to apply NYS-12/12A/12C to the FSEIS; Entergy limits its tolerance of the contention to its reliance on "supporting evidence" identified by New York in earlier versions of the contention.[21] Other than that, both parties oppose admission of the contention.

C. Entergy Answer

Entergy portrays Mr. Chanin's report (and the reports it relies on) as too attenuated to the SAMA analysis conducted for Indian Point and thus insufficient to support New York's arguments in NYS-12C.[22] Moreover, Entergy maintains that New York has not raised a genuine dispute of material fact with the FSEIS because (1) the radionuclides postulated in the FSEIS are indeed small, and radionuclides similar to those used in the Indian Point SAMA analysis in the FSEIS have been found acceptable for SAMA analyses at other facilities in the past, (2) Mr. Chanin's position does not materially contradict conclusions made in the FSEIS regarding

[18] Id. at 7.

[19] Id. at 7-15.

[20] Id. at 1.

[21] Entergy Answer to NYS-12C at 16-17; NRC Staff Answer to NYS-12C at 8.

[22] Entergy Answer to NYS-12C at 17-22.

clean-up costs from plutonium and cesium dispersal, (3) there is no technical reason to require a higher population density multiplier per-square-kilometer than that used in the FSEIS, (4) the FSEIS did include an analysis of severe accidents' impacts on local property values using site-specific data, and (5) New York's demands would transform the SAMA analysis into a worst-case analysis, something that Entergy argues is beyond the requirements for license renewal in NRC regulations.[23]

D. NRC Staff Answer

The NRC Staff attacks the timeliness of elements of NYS-12C, positing that New York could have raised challenges to compliance with the APA and NRC and CEQ regulations earlier and that positions found in Mr. Chanin's report citing other documents could have been raised earlier.[24] Moreover, the NRC Staff describes the agency's compliance with CEQ regulations as immaterial to its licensing decision in this proceeding.[25] On a larger scale, the NRC Staff describes much of New York's claims as vague and represents that the sufficiency of its review of Entergy's SAMA Analysis is subject to challenge in this proceeding, rather than the adequacy of its review contained in the FSEIS.[26]

E. New York Reply

New York replies that NYS-12C was timely filed because its references to CEQ regulations and the APA are not new, given that it has previously raised objections citing such authority regarding similar issues.[27] Similarly, New York responds that Mr. Chanin's report and

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[23] Id. at 22-25.

[24] NRC Staff Answer to NYS-12C at 10-25. Entergy also states that positions in Mr. Chanin's report could have been filed earlier and are thus impermissible support for New York, but does not object to the timeliness of NYS-12C's challenge to Section G of the FSEIS. See Entergy Answer to NYS-12C at 17 n.90.

[25] NRC Staff Answer to NYS-12C at 10, 12 & n.25, 19-20, 23-24.

[26] See id. at 14, 17-20, 22.

[27] New York NYS-12C Reply at 5-6.

the documents cited therein were timely filed because NYS-12C was triggered by the FSEIS's response to NYS-12/12A/12B rather than these documents that support the proposed amended contention.[28] New York also objects to the NRC Staff's supposition that contentions may not be filed against licensing documents issued by the NRC Staff.[29] Further, New York represents that it has provided enough information to support its claims and has not sought to impose a more restrictive "worst-case" SAMA analysis on the review of Entergy's LRA for Indian Point Units 2 and 3 (IP2 and IP3) than NRC regulations require.[30]

F. Board Decision

The NRC Staff is mistaken that its environmental review is immune from challenge in adjudicatory proceedings. It is true that the NRC Staff's safety review is not directly subject to challenge, because it is the sufficiency of the license application that is subject to litigation, not the sufficiency of the NRC Staff's review of that application.[31] Nevertheless, the structure of 10 C.F.R. § 2.309(f)(2) permits new or amended contentions to be filed against multiple forms and stages of the NRC Staff's environmental review and, accordingly, such claims are within the scope of this proceeding pursuant to Section 2.309(f)(1)(iii). Moreover, as we have stated above, Section 2.309(f)(2) allows contentions originally filed against an applicant's ER to be amended if there are data and conclusions in NRC Staff environmental documents "that differ significantly from the data or conclusions in the applicant's documents."[32] NYS-12C's claims regarding the sufficiency of Entergy's and the NRC Staff's SAMA reviews mirror the basic allegation found in the consolidated contention that NYS-12C seeks to amend – namely, that

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[28] Id. at 8.

[29] Id. at 7-11.

[30] Id. 13-17.

[31] See AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 482 (2008).

[32] 10 C.F.R. § 2.309(f)(2).

Entergy's and the NRC Staff's use of the MACCS2 code leads to an underestimation of the cleanup costs from a severe accident.[33] That overarching aspect of this contention, including its citation to the 1996 Sandia National Laboratories Report, has not differed significantly in NYS-12C and is within the scope of the already consolidated NYS-12/12A/12B.

New York's citations to the APA, NRC regulations, and CEQ regulations are neither untimely nor improper at this juncture. As we have previously noted, the NRC Staff is bound to follow the APA and NRC regulations in carrying out its duties under NEPA.[34] Moreover, the NRC gives deference to CEQ regulations to the extent that they do not "'have a substantive impact on the way in which the Commission performs its regulatory functions.'"[35]

Similarly, the fact that New York brings factual and expert support that might be years old to support its claims does not render the contention buttressed by that support either untimely or inadmissible. As we read it, NYS-12C arises from the NRC Staff's FSEIS, which explicitly attempts to resolve concerns raised in NYS-12/12A/12B.[36] The expert analyses brought in NYS-12C are not the underlying basis giving rise to the contention but are tools used by New York to attempt to refute the validity of the NRC Staff's analysis. The basis of the contention pursuant to Section 2.309(f)(1)(ii) is that the NRC Staff's analysis in the FSEIS underestimates severe accident cleanup costs due to use of the MACCS2 code. Therefore, the contention is based on new information, the FSEIS, and is not "late filed."

Also, the fact that Mr. Chanin has asserted a plausible link between the documents he cites and the NRC Staff's SAMA analysis that uses the MACCS2 code constitutes adequate expression of an expert opinion pursuant to Section 2.309(f)(1)(v) and raises a genuine dispute

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[33] See LBP-08-13, 68 NRC at 100-02.

[34] See LBP-10-13, 71 NRC at __ (slip op. at 28).

[35] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-91-02, 33 NRC 61, 72 n.3 (1991) (citations omitted).

[36] See FSEIS at G-22 to G-24.

pursuant to Section 2.309(f)(1)(vi) as to the sufficiency of the NRC Staff's SAMA analysis as articulated in the FSEIS. The extent to which Mr. Chanin's opinion is correct is a merits question that we leave for the evidentiary hearing in this proceeding. Accordingly, we find that NYS-12C is admissible and consolidate it with NYS-12/12A/12B as Consolidated NYS-12C.

III. NYS-17B

A. Background

In granting New York's hearing request in this proceeding, we admitted NYS-17, which alleged that Entergy's ER

> 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 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.[37]

Our ruling stated in pertinent part:

> In conducting its analysis of the impact of the license renewal on land use, Entergy should have considered the impact on real estate values that would be caused by license renewal or nonrenewal. NRC Regulations do not limit consideration to tax-driven land-use changes. Table B-1 merely notes that "significant changes in land use may be associated with population and tax-revenue changes resulting from license renewal." It does not limit consideration to tax-driven land-use changes. Accordingly, we admit NYS-17 as a contention of omission.[38]

On February 27, 2009, New York submitted amended contention NYS-17A, which was based on the NRC Staff's DSEIS, alleging that:

> The [DSEIS] fails to address the impact of the continued operation of IP2 and IP3 for another 20 years on off-site land use, including real estate values in the surrounding area in violation of 10 C.F.R. §§ 51.71(a), 51.71(d), 51.95(c)(1), and 51.95(c)(4).[39]

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[37] LBP-08-13, 68 NRC at 113.

[38] Id. at 116.

[39] June 16, 2009 Licensing Board Order at 7.

We admitted NYS-17A and consolidated it with NYS-17, ruling that "this amended contention update[d] the original to reflect that New York contends that the NRC Staff erred in a similar manner to Entergy and that the original contention was now relevant to the Draft SEIS, as well as to the ER."[40]

On April 22, 2010, we denied a Motion for Summary Disposition of NYS-17/17A filed by Entergy, ruling that NYS-17/17A was

> within the scope of this proceeding and that there remain[ed] a genuine dispute over a material fact regarding the socioeconomic environmental impacts of license renewal on property values adjacent to [Indian Point].[41]

However, in so ruling, the Board included the following caveat:

> We agree with Entergy that proffered NEPA contentions relating to on-site spent fuel storage are outside the scope of this proceeding due to the Waste Confidence Rule (codified as 10 C.F.R. § 51.23), whose continuing viability we recently certified to the Commission.[42]

B. New York Motion and Requests Related to Proposed NYS-17B

On January 24, 2011, New York filed (1) a Motion for Leave to File Timely Amended Bases to Contention 17A (Now to be Designated Contention 17B)[43]; (2) a Request that the proposed amended bases for NYS-17A be deemed not barred by 10 C.F.R. § 51.23(b), that we exempt New York from the requirements of Section 51.23(b), or that we certify the waiver of 10

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[40] Id. at 8.

[41] Licensing Board Memorandum and Order (Denying Entergy's Motion for the Summary Disposition of NYS Contention 17/17A) (Apr. 22, 2010) at 11-17 (unpublished) [hereinafter Apr. 22, 2010 Licensing Board Memorandum and Order].

[42] Id. at 13-14.

[43] State of New York Motion for Leave to File Timely Amended Bases to Contention 17A (Now to be Designated Contention 17B) (Jan. 24, 2011) [hereinafter New York Motion for Leave to File NYS-17B].

C.F.R. § 51.23(b);[44] and (3) a proposed Contention 17B (NYS-17B) containing the amended bases.[45] Proposed NYS-17B reads:

> The FSEIS fails to address the impact of the continued operation of IP2 and IP3 for another 20 years on offsite land use, including real estate values in the surrounding area in violation of 10 C.F.R. §§ 51.71(a), 51.71(d), 51.95(c)(1), and 51.95(c)(4).[46]

Using the update to the Waste Confidence Rule promulgated by the NRC on December 23, 2010, as its starting point, New York asserts that there is no longer a date certain by which spent fuel will be removed from the Indian Point site, and that "there is every reason to believe that spent fuel will remain at the Indian Point site" for an indefinite period following plant shutdown after license renewal.[47] Accordingly, New York argues that granting Entergy's LRA for IP2 and IP3 "will perpetuate depressed land values and reduced tax revenues."[48] Moreover, because in its view the FSEIS did not cure the alleged omissions in Entergy's ER and the DSEIS by analyzing the impacts to off-site property values and tax revenues from long-term storage of spent fuel, New York argues that the FSEIS does not sufficiently address this issue.[49]

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[44] State of New York's Request for a Determination that the Proposed Amended Bases for Contention 17A are not Barred by 10 C.F.R. § 51.23(b), or that Exemption from the Requirements of 10 C.F.R. § 51.23(b) Should be Granted, or that the State has Made a Prima Facie Case that § 51.23(b) Should be Waived as Applied to Contention 17B (Jan. 24, 2011) [hereinafter New York Alternative Requests Re: NYS-17B].

[45] State of New York Contention 17B (Jan. 24, 2011) [hereinafter NYS-17B].

[46] Id. at 2. Entergy and the NRC Staff filed Answers to New York's filings associated with NYS-17B on February 18, 2011. Applicant's Answer to Proposed Amended Contention New York State 17B and the Associated Request for Exemption and/or Waiver of 10 C.F.R. § 51.23(b) (Feb. 18, 2011) [hereinafter Entergy Answer to NYS-17B]; NRC Staff's Answer to the State of New York's Motion for Leave to File Amended Bases to Contention 17A (To be Designated 17B) and Request for an Exemption or Waiver (Feb. 18, 2011) [hereinafter NRC Staff Answer to NYS-17B]. New York filed its Reply on March 4, 2011. State of New York's Combined Reply to the Answers of Entergy and NRC Staff to the State's Proposed Amended Contention NYS-17B (Mar. 4, 2011) [hereinafter New York NYS-17B Reply].

[47] New York Motion for Leave to File NYS-17B at 1-2.

[48] Id. at 6.

New York maintains that this contention is based on new and materially different information because of the new Waste Confidence Rule's shift from a date certain that spent fuel would be removed from the site to an open-ended timeline.[50] Further, New York represents that this amended contention is timely because it was filed within thirty days of the new Waste Confidence Rule's promulgation.[51]

Together with its Motion to add the new bases of NYS-17B to NYS-17/17A, New York provides an alternative pleading that argues claims arising from the long-term on-site storage of spent fuel are not barred by the updated Waste Confidence Rule but, if we were to rule contrary to that position, New York asks the Board to either exempt New York from that Rule or to certify a request for waiver of that Rule to the Commission.[52]

C. Entergy Answer

Entergy opposes admission of NYS-17B and New York's proposed alternative remedies of exemption or waiver. Entergy maintains that NYS-17B and its associated waiver petition are untimely because the possibility of long-term storage of spent fuel at the Indian Point site was publicly known and acknowledged by New York for at least one year before New York submitted its pleadings related to NYS-17B.[53]

Regardless of timeliness, Entergy asserts that this contention is not admissible because the Waste Confidence Rule has generically resolved the challenges that are at the heart of NYS-17B, which relate to the long-term on-site storage of spent fuel at Indian Point for up to sixty years after cessation of operations, and is also inadmissible because the Commission is

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[49] Id. at 4-5.

[50] Id. at 1-4.

[51] Id. at 3.

[52] New York Alternative Requests Re: NYS-17B at 2--11, 13-20.

[53] Entergy Answer to NYS-17B at 15-19.

considering the environmental impacts of long-term on-site storage beyond this period in an ongoing rulemaking.[54] Likewise, Entergy contends that any disputes concerning decommissioning of IP2 and IP3, increases in spent fuel generation, and the environmental impacts of independent spent fuel storage installations are not subject to the NRC's license renewal review.[55] Entergy depicts these claims by New York as outside the scope of this proceeding, immaterial to the NRC's licensing decision in this proceeding, and failing to raise a genuine dispute of law or fact.[56] Entergy also claims that NYS-17B is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v) because the declaration submitted by New York's expert, Dr. Stephen C. Sheppard, does not support New York's arguments and lacks a reasoned basis or explanation.[57]

Entergy also resists New York's requests for an exemption or waiver from the Waste Confidence Rule. Entergy portrays exemption requests as beyond the powers of a licensing board to grant and represents that the provisions of 10 C.F.R. § 2.335 are the exclusive method by which an intervenor may secure the waiver of the application of NRC regulations.[58] Finally, according to Entergy, New York has not successfully met the four-factor test for granting waiver petitions that was articulated by the Commission in Millstone.[59]

D. NRC Staff Answer

The NRC Staff does not oppose admission of those aspects of NYS-17B that amend NYS-17A to refer to the FSEIS, but objects to admission of those aspects of NYS-17B

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[54] Id. at 19-24.

[55] Id. at 25-30.

[56] See id. at 19-30, 32.

[57] Id. at 30-32.

[58] Id. at 33-38.

[59] Id. at 38-46.

concerning "the environmental impacts or alternatives associated with the generation and storage of spent fuel" and opposes New York's exemption request and waiver petition.[60] The NRC Staff characterizes NYS-17B as an inadmissible challenge to the Waste Confidence Rule and therefore as outside the scope of this proceeding because the contention attempts to litigate an environmental issue specifically barred by NRC regulations.[61] Further, the NRC Staff represents that New York's assumptions regarding the timeline for removal of nuclear waste are incorrect, and thus the contention lacks the requisite factual basis.[62] In addition, NYS-17B is unjustifiably late-filed, says the NRC Staff, because the new Waste Confidence Rule and Entergy's 2009 Decommissioning Plan have not produced any new expectation for or information regarding the removal of spent fuel from Indian Point. In addition, the Staff notes that New York has for the first time styled this contention a contention of inadequacy despite its prior designation as a contention of omission.[63]

Similarly, the NRC Staff urges that New York's waiver petition is unwarranted, given that New York has not shown that site-specific environmental impacts at Indian Point associated with the Waste Confidence Rule are significantly different from those in other license renewal proceedings subject to the Rule and given that the Commission's promulgation of the new Waste Confidence Rule specifically considered (and dismissed consideration of) the concerns raised in NYS-17B.[64] Finally, the NRC Staff argues that the Board is not empowered to grant exemptions from NRC regulations, New York would not qualify as the type of party entitled to an exemption, and the Commission specifically suggested New York could pursue a waiver petition

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[60] NRC Staff Answer to NYS-17B at 2.

[61] Id. at 21-26.

[62] Id. at 26-27.

[63] Id. at 27-30.

[64] Id. at 34-37.

to lift the restrictions of the Waste Confidence Rule when that Rule was updated.[65]

E. New York Reply

New York replies that NYS-17B was timely filed because it was submitted consistent with prior Board Orders that deemed analogous challenges as timely during earlier Waste Confidence Rule rulemaking announcements and that NYS-17B was filed within thirty days of the new Rule's promulgation.[66] Similarly, New York asks the Board to regard the predicted dates for spent fuel removal in the new Waste Confidence Rule as previously unavailable new information to permit admission of NYS-17B's new bases pursuant to 10 C.F.R. § 2.309(f)(2).[67]

New York also resists labeling NYS-17B as a challenge to the Waste Confidence Rule and reaffirms its position that the environmental impacts of long-term spent fuel storage are within the scope of this license renewal proceeding due to the increased waste generation resulting from license renewal, the updated Waste Confidence Rule's extension of the date for on-site storage of that increased waste, the FSEIS's discussion of the environmental impacts of the uranium fuel cycle, and off-site land use's classification as a Category 2 issue.[68] According to New York, its expert, Dr. Sheppard, has outlined a genuine dispute over these site-specific (rather than generic) impacts to off-site property values that is material to the NRC's licensing decision in this proceeding, given the significant adverse impact that license renewal could inflict on property values surrounding Indian Point.[69] Finally, New York insists that the Board does have the authority to grant an exemption from the Waste Confidence Rule and that no Commission precedent dictates otherwise.[70]

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[65] Id. at 38-40.

[66] New York NYS-17B Reply at 3-5.

[67] Id.

[68] Id. at 5-8, 11-17.

[69] Id. at 9-11, 19-20.

F. Board Decision

The Board finds that NYS-17B is within the scope of this proceeding and that there exists a genuine dispute of material fact regarding the socioeconomic environmental impacts of license renewal on property values adjacent to the IPEC. NYS-17B differs from previously admitted NYS-17/17A primarily in the substitution of the FSEIS for the DSEIS and, in accord with the Board's previous rulings,[71] we admit NYS-17B insofar as it applies the bases of NYS-17/17A to the FSEIS instead of the DSEIS.

New York attempts to justify its addition of new bases to NYS-17/17A with the Commission's issuance of a revised Waste Confidence Rule and Decision, arguing that there is no longer a "date certain" of 2025 for the removal of spent fuel from IPEC, specifically stating that "[i]f the licenses for IP2 and IP3 are not extended, owners and potential purchasers of land adjacent to Indian Point can contemplate that the site will be cleared of an operating nuclear plant and the structures associated with operation of the plant by 2025."[72] This point is irrelevant because the Waste Confidence Rule has never specified a timetable for the removal of spent fuel and NRC regulations have long envisioned the possibility of spent fuel remaining on reactor sites until the end of site decommissioning — a general period of thirty to sixty years beyond the facility's licensed life.[73] New York also argues that the no-action alternative would

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[70] Id. at 17-19.

[71] See June 16, 2009 Licensing Board Order at 8; LBP-08-13, 68 NRC at 116.

[72] NYS-17B at para. 11.

[73] See 10 C.F.R. §§ 50.82(a)(3) ("Decommissioning will be completed within 60 years of permanent cessation of operations."), 51.23(a) (generically determining "that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary."); Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, 55 Fed.

substantially increase the beneficial uses for land adjacent (within 2 miles) to the IPEC site and increase the value of that land, whereas extended operation of IP2 and IP3, and the presence of the additional waste they generate, will deprive adjacent lands of the economic recovery that they would otherwise enjoy.[74] Further, New York argues that its new bases should be allowed because the impacts on property values of spent fuel are site-specific and are exempt from the provisions of 10 C.F.R. § 51.23(b).[75]

We disagree. The presence of spent fuel is generic to all reactor sites under both the Generic Environmental Impact Statement (GEIS) for License Renewals and the Waste Confidence Rule.[76] To argue that the presence of spent fuel itself on the site affects property values is to assert that there is an environmental impact from the presence of spent fuel that must be assessed on a site-specific basis, contradicting the language of the Waste Confidence Rule, 10 C.F.R. § 51.23(b), which states that there is no such requirement.[77] In promulgating its

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Reg. 38,472, 38,474 (Sept. 18, 1990) (generically determining "that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations."); Requirements for Licensee Actions Regarding the Disposition of Spent Fuel Upon Expiration of Reactor Operating Licenses, 49 Fed. Reg. 34,688, 34,694 (Aug. 31, 1984) (generically determining "that for at least 30 years beyond the expiration of reactor operating licenses no significant environmental impacts will result from the storage of spent fuel in reactor facility storage pools or independent spent fuel storage installations located at reactor or away-from-reactor sites.").

[74] NYS-17B at paras. 5-7.

[75] Id. at para. 19.

[76] 10 C.F.R. Part 51, app. B, tbl. B-1 (labeling each aspect of the uranium fuel cycle and waste management a Category 1 issue exempt from site-specific environmental review); id. § 51.23(a) ("The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and at either onsite or offsite independent spent fuel storage installations.").

[77] Id. § 51.23(b) (". . . no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the reactor operating license or amendment, reactor combined license or

update to the Waste Confidence Rule, the Commission stated that:

> What is not considered in [reactor licensing and rector license renewal] proceedings—due to the generic determination in 10 CFR 51.23(a)—is the potential environmental impact of storage of spent fuel for a 60-year period after the end of licensed operations or the potential environmental impacts of ultimate disposal. Environmental analysis for this period is covered by the environmental analysis the NRC has done in this update to the Waste Confidence Decision . . . .[78]

Because the Commission has specifically barred consideration of the environmental impacts of long-term storage of spent fuel in adjudicatory proceedings, this aspect of NYS-17B is inadmissible as beyond the scope of this proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iii).

Nevertheless, the negative effect on property values predicted by Dr. Sheppard that would result from the longer-term presence of spent fuel anticipated by the updated Waste Confidence Rule is not an environmental impact barred by the Waste Confidence Rule. The potential for spent fuel to indefinitely stay on-site is not an environmental impact associated with the spent fuel itself; rather, it is the occupation of the site by components of IPEC that has the potential to bring down property values if license renewal is granted. It is the value and uses of adjacent property that are site-specific environmental impacts.[79] A challenge based on the impact of IPEC components' long-term on-site existence upon surrounding property values is not barred by the Waste Confidence Rule.

Because the admission of NYS-17B as limited permits an analysis of the putative positive property value impact of the no-action alternative compared to the property value impact of the proposed action, we find it unnecessary to rule on New York's request for an

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amendment, or initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment, or other analysis prepared in connection with the issuance or amendment of an operating license for a nuclear power reactor under parts 50 and 54 of this chapter . . . .").

[78] Waste Confidence Decision Update, 75 Fed. Reg. 81,037, 81,041 (Dec. 23, 2010).

[79] 10 C.F.R. Part 51, app. B, tbl. B-1 ("Significant changes in land use may be associated with population and tax revenue changes resulting from license renewal.").

exemption to or a waiver from the provisions of Section 51.23(b). Accordingly, NYS-17B, as limited, flows from the publication of the FSEIS,[80] is timely, and is admitted and consolidated with NYS-17/17A as Consolidated NYS-17B.[81]

IV. AMENDED NYS-25

A. Background

In granting New York's hearing request in this proceeding, we admitted Contention NYS-25, which alleged that Entergy's LRA lacked "[a]n adequate plan to monitor and manage the effects of aging due to embrittlement of the reactor pressure vessels ('RPVs') and the associated internals."[82] NYS-25, as originally submitted, conceded that Entergy's LRA alluded to the effects of thermal shock transients on the reactors at Indian Point, but New York, through its expert, argued that "a 'degradation in ductility' (embrittlement) will adversely affect the reactor's ability to withstand pressurized thermal shock transients."[83] Therefore, NYS-25 claimed that Entergy's LRA was inadequate because it did not contain any evaluation of the consequences of embrittlement in its analysis of the effect of transient loads.[84] NYS-25 characterized this as a fatal omission in Entergy's LRA because, without such an evaluation, the LRA failed to show "'that the embrittled RPV internal structures will not fail [during the period of extended operations] and that a coolable core geometry will be maintain[ed] subsequent to a [Design Basis Loss of Coolant Accident]."[85] We found that this contention raised a genuine

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[80] See NYS-17B at paras. 21-23.

[81] While not necessary to our decision, we agree with Entergy and the NRC Staff that the Board does not have the authority to exempt a litigant from the import of the Waste Confidence Rule and that submission of a waiver request to the Commission would be inappropriate based on the facts presented here.

[82] LBP-08-13, 68 NRC at 129.

[83] Id. at 131.

[84] Id.

[85] Id.

dispute that was within the scope of this proceeding regarding "[w]hether an AMP [Aging Management Program] is necessary to manage the cumulative effects of embrittlement of the RPVs and associated internals."[86]

On July 14, 2010, Entergy submitted its ninth LRA amendment, NL-10-063, which includes Entergy's Reactor Vessel Internals Program.[87] Based on LRA Amendment 9, New York filed a Motion on September 15, 2010, to add new bases to the already-admitted contention, NYS-25.[88]

B. New York New Bases for NYS-25

New York presents new bases for NYS-25 to alter the focus of its contention from one of omission to one of inadequacy, asserting that LRA Amendment 9 is inadequate under 10 C.F.R. § 54.51(c)(1)(iii).[89] New York concedes that LRA Amendment 9 attempts to provide an AMP for Indian Point's reactor pressure vessels and internal components, but claims that Entergy's LRA remains inadequate for the following new reasons:

> (1) failing to consider the synergistic effects of embrittlement and metal fatigue on RPV and internals; (2) failing to provide sufficient objective details about when it will conduct and complete baseline inspections and measurements; (3) failing to provide sufficient objective details about how and when it will implement corrective actions to address problems identified with embrittlement; (4) failing to include adequate inspection techniques to identify embrittlement issues for

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[86] Id.

[87] LRA amend. 9.

[88] State of New York's Motion for Leave to File Additional Bases for Previously-Admitted Contention NYS-25 in Response to Entergy's July 14, 2010 Proposed Aging Management Program for Reactor Pressure Vessels and Internal Components (Sept. 15, 2010) [hereinafter NYS-25]. Entergy and the NRC Staff filed Answers opposing New York's Motion on October 12, 2010. Applicant's Answer to Amended Contention New York State 25 Concerning Aging Management of Embrittlement of Reactor Vessel Internals (Oct. 12, 2010) [hereinafter Entergy Answer to NYS-25]; NRC Staff's Answer to State of New York's Motion for Leave to File Additional Bases for Previously-Admitted Contention NYS-25 (Oct. 12, 2010) [hereinafter NRC Staff Answer to NYS-25]. New York filed a Joint Reply to Entergy's and the NRC Staff's Answers on October 22, 2010. State of New York's Joint Reply to Entergy and NRC Staff's Separate Answers to the State's Additional Bases for Previously-Admitted Contention NYS-25 (Oct. 22, 2010) [hereinafter New York NYS-25 Reply].

[89] NYS-25 at 5.

> certain RPV internals, including bolts; and (5) relying on vague future commitments to undertake corrective action when Entergy has encountered difficulties in tracking and completing commitments and corrective actions in a timely manner.[90]

The specific components that New York claims should have been analyzed include:

> the core baffle, intermediate shells, former plates and bolts (particularly the re-entrant corners), and including the baffle-to-baffle bolt locations, the core barrel-to-former bolt locations, and baffle-to-former bolt locations, core barrel (and its welds), lower core plate and support structures, clevis bolts, fuel alignment pins, thermal shield, the lower support column and mixer, and the control rods and their associated guide tubes, plates, and welds.[91]

Relying on the Declaration of Dr. Richard T. Lahey, Jr., New York claims that "[i]nadequate management of the effects of embrittlement on RPV and internals could" result in performance failures and cracks in these components, "which could result in the breaking away of parts which would interfere with other components and systems performing their safety functions."[92] New York labels these new bases material to the NRC's licensing decision in this proceeding because they identify a threat to public health and safety, and the NRC Staff is obligated to make findings regarding the impact the proposed action will have on the public health and safety before Entergy's LRA can be approved as submitted, modified, or rejected.[93]

C. Entergy Answer

Entergy characterizes New York's new bases for NYS-25 as untimely in part and as "rais[ing] issues beyond the scope of this proceeding, lack[ing] adequate factual and legal

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[90] Id. at 6.

[91] Id., Additional Bases for Previously-Admitted Contention NYS-25 (Embrittlement of Reactor Pressure Vessels and Associated Internals) at 1 (Sept. 15, 2010) [hereinafter Additional Bases for NYS-25].

[92] NYS-25 at 4 (citing Declaration of Dr. Richard T. Lahey, Jr. at paras. 13-14, 16-18 (Sept. 15, 2010)).

[93] Id.

support, and fail[ing] to raise a genuine dispute on a material issue of law or fact."[94] First, Entergy represents that there is neither a sufficiently enumerated technical or factual basis nor a specific legal or factual challenge to Entergy's reactor vessel internal program, in New York's pleading and New York's expert's declaration, both of which allege that Entergy does not adequately consider "the 'synergistic' aging effects of embrittlement and metal fatigue on the RPV and RPV internals."[95] Likewise, Entergy urges the Board to hold that New York's references to certain effects and components[96] (1) do not challenge any specific portion of Entergy's LRA Amendment 9, (2) are beyond the scope of the originally-admitted contention, and (3) regarding control rods, are not subject to aging management review.[97] Entergy also insists that New York's attacks on the requirements of the NRC's Generic Aging Lessons Learned (GALL) Report and Standard Review Plan for License Renewals are statements of what New York believes the NRC's policy ought to be, which is outside the scope of this proceeding. Entergy urges the Board to regard New York's concerns about "the purported synergistic effects of RPV embrittlement and metal fatigue on the RPV and RPV internals" as untimely, without adequate explanation, because, according to Entergy, it included these items in its original LRA and New York has already filed contentions dealing with embrittlement and metal fatigue in its initial hearing request.[98]

Second, regarding New York's claimed omission by Entergy of the timing of inspections to be conducted under the reactor vessel internals program, Entergy argues that this claim

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[94] Entergy Answer to NYS-25 at 1-2.

[95] Id. at 11-14. Part of the Entergy's challenge to the new bases' admissibility lies in its questioning of the qualifications of Dr. Lahey to weigh in on metallurgy issues, given that he is an expert in multiphase flow and heat transfer technology, not metallurgy. Id. at 2 & n.3.

[96] E.g., the intermediate shell and stub tubes, control rods, thermally-aged cast stainless steel in-core components, and boric acid corrosion of the upper RPV head. See id. at 12.

[97] Id.

[98] Id. at 14-16.

neither provides a factual basis nor raises a genuine dispute with respect to Entergy's LRA because LRA Amendment 9 adheres to the guidance provided by the Electric Power Research Institute (EPRI) Materials Reliability Program 227 (MRP-227), which lists the frequency of inspections to be conducted for each primary plant components—something present in Entergy's LRA which New York mistakenly asserts is missing.[99] Similarly, relying on the Board's original contention admissibility decision, Entergy categorizes any asserted requirements of baseline inspections before extended operations as outside the scope of this proceeding.[100]

Third, in response to New York's claim that inspection techniques identified in LRA Amendment 9 are inadequate, Entergy states that New York does not raise a genuine dispute nor provide expert support for its specific criticisms of these alleged inadequacies, especially given that Entergy adheres to current requirements in MRP-227 which explain why different inspection techniques are used for different components—none of which New York acknowledges in its new bases for NYS-25.[101]

Fourth, Entergy asks the Board to dismiss New York's claim that Entergy's LRA Amendment 9 lacks needed provisions for preventative actions, arguing that "preventative actions are specified for RVI, although not as part of the RVI Program."[102] For example, according to Entergy, "the Water Chemistry Control—Primary and Secondary Program provides for preventative action by maintaining primary water chemistry in accordance with EPRI guidelines to minimize the potential for SCC [stress corrosion cracking] and IASCC [irradiation-

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[99] Id. at 16-17.

[100] Id. at 17.

[101] Id. at 18-20.

[102] Id. at 21.

assisted stress corrosion cracking]."[103] Moreover, Entergy portrays New York's claimed lack of sufficient details in the LRA about future corrective actions as not launching any specific challenge to Entergy's LRA because MRP-227, upon which Entergy relies, outlines specific protocol for approaching corrective actions that are consistent with Entergy's required corrective action program and quality assurance program as mandated under Part 50.[104]

Finally, Entergy criticizes New York's reliance on a September 2010 NRC audit report of Entergy's Vermont Yankee plant to show that Entergy will not meet its requirements under a renewed license for the reactors at Indian Point, arguing that that audit report positively evaluated Entergy and that past performance of a plant is not properly the subject of a license renewal proceeding.[105]

D. NRC Staff Answer

The NRC Staff also asks the Board to find New York's additional bases for NYS-25 inadmissible because, as articulated by the Staff, New York is contesting what it thinks ought to be required for an adequate AMP as opposed to what is required of an applicant under NRC regulations.[106] First, the NRC Staff argues that the challenges to the RPV in the new bases for NYS-25 do not raise a genuine dispute with Entergy's LRA because "the scope of [the] AMP [submitted in LRA Amendment 9] does not include the RPV and other components of the reactor coolant system pressure boundary."[107] The NRC Staff also asks the Board to find that these challenges are untimely because, without explanation, they seek for the first time to take aim at Entergy's original LRA, which discussed "RPV neutron embrittlement, the associated TLAAs [Time-Limited Aging Analyses, and] Entergy's approach to managing the effects of RPV

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[103] Id.

[104] Id. at 21-22.

[105] Id. at 22-23.

[106] NRC Staff Answer to NYS-25 at 8.

[107] Id. at 8-9.

neutron embrittlement under 10 C.F.R. § 54.21(c)(1)."[108] Further, the NRC Staff states that there is no requirement that control rods be subject to an AMP.[109]

Second, because "the LRA considered that the reactor vessel internals environment required consideration of neutron fluence and treated borated water at high and moderate temperatures" and recognized three specific programs to deal with the effects of these factors on reactor vessel internals, the NRC Staff posits that New York has not explained which part of Entergy's LRA lacks an analysis of the synergistic effects of aging.[110]

Third, the NRC Staff emphasizes that no regulation requires baseline inspections before the period of extended operation of the components at issue in LRA Amendment 9. According to the NRC Staff, "there is nothing in the regulations that requires Entergy to implement action at any specific time, as aging can be adequately managed by taking corrective action 'when it is needed.'"[111] Nor is there any requirement to take preventative action rather than corrective action, states the NRC Staff, given that the GALL Report approves of corrective measures to the exclusion of preventative measures.[112]

Finally, the NRC Staff argues that New York cites no requirement for New York's preferred inspection technique and that issues relating to Entergy's ability to meet commitments made in its LRA are outside the scope of this proceeding.[113]

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[108] Id. at 9.

[109] Id. at 9-10.

[110] Id. at 10-11.

[111] Id. at 11-12 (citing LBP-08-13, 68 NRC at 140).

[112] Id. at 12.

[113] Id. at 12-13.

E. New York Reply

New York replies that the new bases it has submitted for NYS-25 are aimed solely at RPV internals, stresses that the new bases are within the scope of the previously-admitted contention, and clarifies that the new bases mention the RPV itself in order to reiterate "out of an abundance of caution" NYS-25's original complaint that Entergy's LRA still lacks a valid AMP for the RPV itself.[114] New York also argues that Entergy's reliance on MRP-227 is subject to challenge in this proceeding because that industry-produced document has not yet been endorsed by the NRC and further argues that even if MRP-227 would be endorsed by the NRC, Entergy's fulfillment of that document's suggestions would still be subject to challenge in this proceeding because it is only guidance and is not binding.[115]

New York also claims that it has presented a genuine dispute of material fact over Entergy's ability to synergistically manage the effects of aging because Entergy has only claimed that it has several independent (as opposed to synergistic) programs that manage the effects of aging.[116] Regarding each of the three aging management programs in LRA Amendment 9 cited by the NRC Staff as meeting New York's concerns (namely, Inservice Inspection, Thermal Aging and Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel, and Water Chemistry Control—Primary and Secondary Program), New York asserts that each of these, "by its terms, does not examine or evaluate the synergistic effects of embrittlement and fatigue leading to components failures and compromised core cooling during a transient shock event . . . ."[117] In the same vein, New York posits that the Reactor Vessel

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[114] New York NYS-25 Reply at 4-5 & n.2.

[115] Id. at 6-11 (citations omitted).

[116] Id. at 12-13.

[117] Id. at 13-14. We note that New York generally uses the same language in attacking the three programs cited by the NRC Staff. However, for Inservice Inspection, New York complains that "by its terms, it does examine or evaluate the synergistic effects of embrittlement and fatigue." Id. at 14 (emphasis added). We assume that this passage, when read in the context

Head Penetration Inspection Program (cited favorably by the NRC Staff to address New York's concerns) "by its terms, it does not examine or evaluate the effect of a transient thermal shock" on control rod penetrations and seal welds.[118] Moreover, New York responds that because a reactor's control rods and seal welds are located within the RPV, even MRP-227 and the GALL Report recognize that they are RPV internals and, accordingly, New York argues that these components require aging management review.[119]

As for its challenges to Entergy's proposed inspection techniques, New York insists that it need not bring expert opinions to support its position, given that MRP-227 and the NRC's own opinions elsewhere have questioned the viability of visual testing.[120] Finally, New York urges the Board to consider the new bases to NYS-25 as timely filed because they arise out of and criticize the adequacy of Entergy's AMP for RPV internals, which did not exist before July 2010.[121]

F. Board Decision

We hereby grant New York's Motion for Leave to add additional bases to previously admitted NYS-25 without altering or amending the contention as written.[122]

In its original petition to intervene, New York alleged that, with respect to the effects of aging due to embrittlement of RPVs and the associated internals, Entergy had no meaningful

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of New York's general complaint, intended to aver that the Inservice Inspection program does not wrestle with the synergistic effects of embrittlement and fatigue.

[118] Id. at 14-15.

[119] Id. at 15.

[120] Id. at 15-17.

[121] Id. at 17-18.

[122] The Board expressly permitted new contentions based on LRA Amendment 9 to be filed on or before September 15, 2010. See Licensing Board Order (Granting New York's Motion to Extend Deadline for Filing New Contentions) (Aug. 12, 2010) at 1 (unpublished). Because NYS-25 was filed within that time period and it challenges the AMP for RPV internals in Entergy's that appear for the first time in LRA Amendment 9, we deem it timely pursuant to Section 2.309(f)(2).

plan. We admitted NYS-25 based on that claim, finding that it met the requirements of 10 C.F.R. § 2.309(f)(1).[123]

Thereafter, Entergy submitted an amendment to its LRA which addressed claims that were within the scope of NYS-25. In response, New York filed this Motion, which claims that LRA Amendment 9 does not present an adequate AMP, and in support of this claim, New York offers the proffered new bases discussed herein.

In response, both Entergy and the NRC Staff argue that the specifics cited to by New York are not required by regulation but, in so doing, we believe they have missed the point. At issue is whether Entergy has presented an adequate AMP. The applicable regulation requires that "the applicant [Entergy] shall demonstrate that . . . (iii) [t]he effects of aging on the intended function(s) will be adequately managed for the period of extended operation."[124] The regulation does not specify exactly how this demonstration will be accomplished. It may well be that after a hearing we conclude that the alleged deficiencies are accurately described by New York but that, nevertheless, Entergy's AMP is adequate. At this stage of the proceeding, however, we do not weigh the evidence.[125] By granting New York's Motion, we agree that the allegations it has made flow from LRA Amendment 9, are within the scope of the contention as originally admitted, and support the existence of a genuine dispute regarding the adequacy of Entergy's AMP relating to the potential embrittlement of RPV and related internals. After the hearing we will determine whether, considering all relevant factors including the new bases proffered by New York, Entergy has presented an adequate AMP. New York's Motion to add bases to NYS-25 is granted.

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[123] LBP-08-13, 68 NRC at 129-31.

[124] 10 C.F.R. § 54.21(c)(1).

[125] See LBP-08-13, 68 NRC at 61-64 (explaining the licensing board's duties during contention admissibility).

V. NYS-37

A. Background and New York Motion

NYS-37 states that:

> The FSEIS discussion of energy alternatives (Chapter 8) fails to provide a meaningful analysis of energy alternatives or responses to criticism of the DSEIS, in violation of the requirements of 42 U.S.C. §§ 4331 and 4332; 10 C.F.R. §§ 51.91(A)(1), and (C), 51.92(2), 51.95(C)(4), and Part 51, Subpart A, Appendix A and Appendix B; 40 C.F.R. §§ 1052.1, 1052.2(G), 1502.9, and 1502.14; and 5 U.S.C. § 551 et seq.[126]

In addition to expressly incorporating New York's previously admitted bases from NYS-9/33, NYS-37 raises new claims that the FSEIS does not satisfy the NRC's NEPA obligations because it, inter alia,

> failed to (a) meaningfully consider significant new information material to non-fossil fuel alternatives; (b) failed to respond in the FSEIS to the State's detailed criticism of the DSEIS; (c) failed to meaningfully analyze renewable sector generation, energy efficiency and conservation, purchased electrical power and combined heat and power; and (d) relied substantially on inaccurate information.[127]

Reviewing the previous contentions, we admitted NYS-9 inasmuch as it raised a genuine dispute over Entergy's need to "to consider energy conservation for the 'no-action' alternative in its ER," but we found inadmissible "those portions of NYS-9 that allege[d] ER deficiencies due to Entergy's lack of considering energy conservation in its alternatives analysis for the defined goal of producing 2158 MWe of baseload generation."[128] We later admitted NYS-33, which challenged specific portions of the DSEIS's analysis addressing "energy conservation and

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[126] State of New York Contention Concerning NRC Staff's Final Supplemental Environmental Impact Statement (Feb. 3, 2011) at 2 [hereinafter NYS-37].

[127] State of New York's Supplement to Motion for Leave to File New and Amended Contention 37 Concerning Chapter 8 of the December 3, 2010 Final Supplemental Environmental Impact Statement (Feb. 3, 2011) at 3 [hereinafter New York Supplemental Motion for Leave to File NYS-37].

[128] LBP-08-13, 68 NRC at 93.

efficiency, the viability of renewable energy resources, energy transmission capacity, and possible combinations of different energy sources" to fulfill the Staff's obligations regarding the no-action alternative. We consolidated NYS-33 with NYS-9.[129]

Thereafter, on February 3, 2011, New York filed NYS-37,[130] followed by an unopposed Motion filed nunc pro tunc to extend the page limitations for NYS-37.[131]

B. Entergy Answer

Without waiving its arguments against the admission of NYS-9/33, Entergy does not oppose admission of NYS-37 to the extent it seeks to "update" or incorporate the underlying support for NYS-9/33.[132]

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[129] June 16, 2009 Licensing Board Memorandum and Order at 9, 13.

[130] See New York Supplemental Motion for Leave to File NYS-37; NYS-37. New York's submitted its Supplemental Motion for Leave to File NYS-37 on the same day the original Motion for Leave was filed. Compare New York Supplemental Motion for Leave to File NYS-37 with State of New York's Motion for Leave to File New and Amended Contentions Concerning Chapter 8 of the December 3, 2010 Final Supplemental Environmental Impact Statement (Feb. 3, 2011).

[131] New York State Motion for Approval of Extension of Page Limitations for Proposed Contention 37, Nunc Pro Tunc, January 31, 2011 (Feb. 23, 2011); Supplemental Certification to the State of New York's Motion for Approval Of Extension Of Page Limitations For Proposed Contention 37, Nunc Pro Tunc, January 31, 2011 (Feb. 23, 2011). We grant New York's nunc pro tunc Motion to extend the page limitations because it is unopposed and we accept New York's reasonable interpretation of our Scheduling Order that motions themselves are bound by the twenty-five page limit but contentions themselves are not restricted in the same manner. Cf. July 1, 2010 Scheduling Order at para. G.1.

On March 7, 2011, Entergy filed an Answer opposing admission of NYS-37 in part while the NRC Staff filed an Answer opposing admission of NYS-37 in its entirety. Applicant's Answer to New York State's Contention 37 Concerning the NRC Staff's Evaluation of Energy Alternatives (Mar. 7, 2011) [hereinafter Entergy Answer to NYS-37]; NRC Staff's Answer to the State of New York's Motion for Leave to File a New Contention, and New Contention 37, Concerning the Final Supplemental Environmental Impact Statement (Mar. 7, 2011) [hereinafter NRC Staff Answer to NYS-37]. On March 18, 2011, New York filed its Combined Reply to Entergy's and the NRC Staff's Answers. State of New York's Combined Reply to Entergy and NRC Staff's Answers to the State's Proposed Contention 37 Concerning NRC Staff's December 2010 Final Environmental Impact Statement and its Deficient Analysis of Energy Alternatives (Mar. 18, 2011) [hereinafter New York NYS-37 Reply].

[132] Entergy Answer to NYS-37 at 2, 13.

However, Entergy argues that the remainder of NYS-37 is inadmissible. Entergy portrays New York's positions that the FSEIS overestimates the need for power and that the FSEIS misrepresents the characteristics of the power sources essential to replacing power produced by Indian Point as outside the scope of this proceeding.[133] According to Entergy, NYS-37 provides an invalid factual and legal basis for challenging the FSEIS's discussion of non-fossil fuel alternatives to license renewal.[134] Entergy also suggests that some of the documents relied on by New York and its experts either are speculative or undermine the likelihood that alternatives cited by New York could be adequate replacements for Indian Point.[135] Similarly, Entergy stresses that, in its view, the FSEIS relies on reasonably up-to-date information, adequately takes into consideration the comments raised on the DSEIS, and has conducted the requisite thorough review of this issue.[136]

C. NRC Staff Answer

The NRC Staff opposes admission all of NYS-37 because, according to the NRC Staff, it is untimely and does not meet the NRC's contention admissibility standards. Regarding the timeliness standard for new and amended NEPA contentions under Section 2.309(f)(2), the NRC Staff represents that New York has not demonstrated how the information and conclusion in the FSEIS regarding the no-action alternative differ significantly from those described in the DSEIS.[137] Moreover, relying on Prairie Island, the NRC Staff urges the Board to view as conclusory and inadequate New York's explanation for the timeliness of NYS-37 under the alternative timeliness factors of Section 2.309(f)(2)(i)-(iii), given that information in documents

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[133] Id. at 13-14.

[134] Id. at 14-17.

[135] Id. at 17-21.

[136] Id. at 19-24.

[137] NRC Staff Answer to NYS-37 at 8-10, 14-15, 19, 22-23.

relied on by New York is dated much earlier than the publication of the FSEIS.[138] Conversely, because they were not attached to New York's pleadings, the NRC Staff claims that the Board may not consider other documents cited by New York that were dated after publication of the FSEIS.[139] The NRC Staff also opposes the admission of NYS-37 by claiming that New York could have raised aspects of NYS-37 relating to renewable energy standards, energy efficiency/energy conservation, purchased power, transmission corridors, combined heat and power projects, and non-fossil fuel alternatives either when the information regarding these issues became available or subsequent to discussion of these issues in the ER and the DSEIS.[140] Under the NRC's standards for admission of nontimely contentions (Section 2.309(c)), the NRC Staff insists that New York has not made the requisite showing of good cause and will have ample opportunity through NYS-9/33 to litigate those issues raised in NYS-37.[141]

Turning to the admissibility of NYS-37 under Section 2.309(f)(1), the NRC Staff classifies the contention and its supporting documents as focused on possible alternatives to license renewal rather than the no-action alternative which, the staff notes, the Board explicitly rejected as outside the scope of this proceeding, as well as immaterial to the NRC's licensing decision in this proceeding.[142] Further, the NRC Staff represents that the documents cited by New York as unaddressed in the FSEIS were never attached to New York's comments on the DSEIS, and thus, the NRC Staff argues, it was not required to include any response to those documents in

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[138] Id. at 10-11 & n.22, 24.

[139] Id. at 11-12 nn.23, 25.

[140] Id. at 19-20, 22-25.

[141] Id. at 12-13.

[142] Id. at 13-16, 18-19.

the FSEIS.[143] Lastly, the NRC Staff asserts that New York's mischaracterization of information regarding land disturbance and repowered facilities shows that these claims lack basis.[144]

D. New York Reply

New York replies that its concerns in NYS-37 were timely filed because the documents relied on by New York are not the timeliness triggers or the bases for its contention. Instead, New York reasons that the NRC Staff's analysis and conclusions in the FSEIS, much of it appearing for the first time in the FSEIS, give rise to the contention.[145] According to New York, NYS-37 is not a demand for a need-for-power analysis but rather an assertion that the no-action alternative itself is inadequately analyzed in the FSEIS because the analysis relies on faulty assumptions and information describing the New York energy markets.[146] Moreover, New York posits that the claims embedded in NYS-37 are material to the NRC's licensing decision in this proceeding due to the relief New York would be entitled to if it prevails on the merits, namely, the denial of Entergy's LRA or the rewriting of the FSEIS.[147] Finally, New York represents that the documents it relies on have either been served on the NRC Staff in this adjudicatory proceeding or in the NEPA comment process, making the NRC Staff well aware of New York's position.[148]

B. Board Decision

We find that NYS-37 was timely filed and that portions of the contention are admissible.

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[143] Id. at 16-17.

[144] Id. at 24.

[145] New York NYS-37 Reply at 11-14.

[146] Id. at 14-17.

[147] Id. at 17-23.

[148] Id. at 24.

We agree with New York that the timelessness trigger for the filling of this contention was the publication of the FSEIS. At the heart of this contention is the claim that the NRC Staff relied on outdated information and ignored well-reasoned and supported comments to the DSEIS in conducting its analysis and in reaching conclusions relating to the no-action alternative that were articulated in the FSEIS. Accordingly, we hold that this contention could not have been filed prior to the publication of the FSEIS and, after its publication, the contention was timely filed, consistent with the provisions of this Board's July 1, 2010 Scheduling Order.

After consideration of the factors discussed in the parties' pleadings, NYS-37 is admitted, in part, to the extent that it updates and supersedes NYS-9/33 and to the extent that it challenges the adequacy of the discussion in the FSEIS addressing comments made regarding the environmental impact of the no-action alternative as described in the DSEIS.

New York has alleged that the discussion of the no-action alternative in the FSEIS is, for all material purposes, identical to the discussion of the no-action alternative in the DSEIS,[149] a proposition with which the NRC Staff appears to agree.[150] But, in addition to the previously alleged deficiencies, New York now alleges, with new supporting declarations from David Schlissel,[151] Peter Lanzalotta,[152] and Peter Bradford,[153] that the FSEIS is deficient for failing to discuss information, published after the DSEIS's issuance in December 2008, that is material to understanding the environmental impact of the no-action alternative and also that it fails to adequately address comments made to the DSEIS.[154]

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[149] NYS-37 at 9.

[150] NRC Staff Answer to NYS-37 at 8-10.

[151] NYS-37, Attach. 4: Declaration of David A. Schlissel (Jan. 31, 2011).

[152] Id., Attach. 5, Declaration of Peter J. Lanzalotta (Feb. 1, 2011).

[153] Id., Attach. 6, Declaration of Peter A. Bradford (Feb. 2, 2011).

[154] NYS-37 at 8-17.

It is only these aspects of NYS-37 that we find admissible. In admitting this contention, we are not authorizing a broad-ranged inquiry into alternative scenarios and the need for power, which would be precluded by Commission regulations,[155] and which we have previously excluded.[156]

Remembering that we are still at the contention admissibility stage, as opposed to the merits stage of this proceeding, we believe that New York has proffered sufficient information to establish the existence of a material dispute. Specifically, we have previously held and continue to hold that New York has raised a genuine issue regarding the adequacy of the evaluation of the environmental impact of the no-action alternative to the relicensing of IP2 and IP3. Our ruling here updates, but does not materially expand the scope of, this contention.

VI. RK-EC-3/CW-EC-1

In Riverkeeper, Inc.'s (Riverkeeper's) hearing request, Contention EC-3 (RK-EC-3), subtitled "Failure to Adequately Analyze Impacts of Spent Fuel Pools," alleged that Entergy's ER did not:

> [S]atisfy 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.[157]

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[155] 10 C.F.R. § 51.95(c)(2) ("The supplemental environmental impact statement for license renewal is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation.").

[156] June 16, 2009 Licensing Board Order at 11-13; LBP-08-13, 68 NRC at 92-93. We find New York's concerns about the FSEIS's analysis of certain non-fossil alternatives untimely, given that these issues go beyond those raised by New York in its contentions on the DSEIS and New York could have raised them earlier.

[157] LBP-08-13, 68 NRC at 188.

In Hudson River Sloop Clearwater, Inc.'s (Clearwater's) hearing request, Contention EC-1 (CW-EC-1) also asserted a "Failure of [Entergy's] ER to Adequately Address the Impacts of Known & Unknown Leaks."[158] We admitted both of these contentions, and consolidated them as "Riverkeeper EC-3 and Clearwater EC-1 – Spent Fuel Pool Leaks" (RK-EC-3/CW-EC-1).[159] On May 28, 2009, we permitted Riverkeeper and Clearwater to apply RK-EC-3/CW-EC-1 to the NRC Staff's analysis in the DSEIS.[160]

On February 3, 2011, Riverkeeper and Clearwater moved to apply RK-EC-3/CW-EC-1 to the FSEIS.[161] Without waiving their objections to the merits or the original admissibility of the consolidated contention, Entergy and the NRC Staff do not oppose Riverkeeper's and Clearwater's request.[162]

The Board hereby grants Clearwater's and Riverkeeper's Motion. RK-EC-3/CW-EC-1 shall apply to Entergy's ER, the NRC Staff's DSEIS, and the NRC Staff's FSEIS.

VII. CW-RK WASTE CONFIDENCE RULE CONTENTIONS

A. Background

On January 24, 2011, Clearwater and Riverkeeper jointly filed new contentions: Clearwater EC-8/Riverkeeper EC-6 (CW-EC-8/RK-EC-6), Clearwater SC-2/Riverkeeper TC-3

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[158] Id. at 191.

[159] Id. at 190-91, 193-94, 220.

[160] Licensing Board Order (Applying Consolidated Contention Riverkeeper EC-3/Clearwater EC-1 to the NRC Staff's Draft Supplemental Environmental Impact Statement) (May 28, 2009) at 1-2 (unpublished).

[161] Riverkeeper, Inc. and Clearwater, Inc. Challenge to NRC Staff's Assessment of Impacts of Spent Fuel Pool Leaks in the Final Supplemental Environmental Impact Statement (Feb. 3, 2011) at 3.

[162] Applicant's Answer to Riverkeeper, Inc. and Hudson River Sloop Clearwater, Inc.'s Filing Regarding Consolidated Contention Riverkeeper EC-3/Clearwater EC-1 (Mar. 7, 2011) at 2; NRC Staff's Answer to Riverkeeper, Inc. and Clearwater, Inc.'s "Challenge to NRC Staff's Assessment of Impacts of Spent Fuel Pool Leaks in the Final Supplemental Environmental Impact Statement" (Mar. 7, 2011) at 2 & n.6.

(CW-SC-2/RK-TC-3), Clearwater EC-9/Riverkeeper EC-7 (CW-EC-9/RK-EC-7), and Clearwater SC-3/Riverkeeper TC-4 (CW-SC-3/RK-TC-4).[163]

B. Clearwater and Riverkeeper Joint Motion

Clearwater's and Riverkeeper's four joint contentions come in two groups, with each group containing one environmental contention and one safety contention: the first group presumes that the recent updates to the NRC's Waste Confidence Rule are "invalid" (CW-EC-8/RK-EC-6 and CW-SC-2/RK-TC-3), while the second group is intended to apply in the event

[163] Hudson River Sloop Clearwater, Inc. and Riverkeeper, Inc.'s Joint Motion for Leave to Add New Contentions Based Upon New Information and Petition to Add New Contentions (Jan. 24, 2011) [hereinafter CW-RK Joint Contentions]. On February 10, 2011, New York filed an Answer supporting these new contentions. State of New York Answer in Support of the Admission of Clearwater and Riverkeeper's Proposed Waste Confidence Contentions: Clearwater EC-8, SC-2, EC-9, SC-3, Riverkeeper EC-6, TC-3, EC-7, TC-4 (Feb. 10, 2011) [hereinafter New York Answer to CW-RK Joint Contentions]. On February 18, 2011, Entergy and the NRC Staff filed Answers opposing admission of Clearwater's and Riverkeeper's joint new contentions. Applicant's Answer to Hudson River Sloop Clearwater, Inc. and Riverkeeper, Inc.'s New Contentions Concerning the Waste Confidence Rule (Feb. 18, 2011) [hereinafter Entergy Answer to CW-RK Joint Contentions]; NRC Staff's Answer to Hudson River Sloop Clearwater, Inc. and Riverkeeper, Inc.'s Joint Motion and Petition to Add New Contentions (Feb. 18, 2011) [hereinafter NRC Staff Answer to CW-RK Joint Contentions]. On February 25, 2011, along with their Joint Combined Reply to Entergy's and the NRC Staff's Answers, Clearwater and Riverkeeper filed a Petition for Exemption from or Waiver of Restrictions Contained in 10 C.F.R. § 51.23(b) (Exemption/Waiver Petition). Combined Reply to NRC Staff and Entergy's Answers in Opposition to Clearwater and Riverkeeper's Joint Motion for Leave and Petition to Add New Contentions (Feb. 25, 2011) [hereinafter CW-RK Joint Contentions Reply]; Hudson River Sloop Clearwater, Inc. and Riverkeeper, Inc.'s Petition for Exemption from or Waiver of Restrictions Contained in 10 C.F.R. § 51.23 (Feb. 25, 2011) [hereinafter CW-RK Waiver/Exemption Petition].

On March 4, 2011, Entergy filed a Motion to Strike regarding Clearwater's and Riverkeeper's Exemption/Waiver Petition, portions of Clearwater's and Riverkeeper's Reply, and documents filed with Clearwater's and Riverkeeper's Reply. Applicant's Motion to Strike (Mar. 4, 2011) [hereinafter Entergy Motion to Strike]. The NRC Staff supports Entergy's Motion to Strike, while Clearwater and Riverkeeper oppose Entergy's Motion to Strike. NRC Staff's Answer to Applicant's Motion to Strike Hudson River Sloop Clearwater, Inc. and Riverkeeper, Inc.'s Petition for Waiver and Portions of their Combined Reply to Answers to their New Waste Confidence Contentions (Mar. 14, 2011) [hereinafter NRC Staff Answer to Entergy Motion to Strike]; Petitioners' Opposition to Entergy's Motion to Strike (Mar. 21, 2011) [hereinafter CW-RK Answer to Entergy Motion to Strike]. The Board granted Clearwater and Riverkeeper an extension of time within which to file their Answer responding to Entergy's Motion to Strike. See Licensing Board Order (Granting New York's and Clearwater's/Riverkeeper's Motions for Extensions of Time) (Mar. 11, 2011) at 2 (unpublished).

the Board finds the Waste Confidence Rule valid (CW-EC-9/RK-EC-7 and CW-SC-3/RK-TC-4).[164]

As for the first group of Waste Confidence Rule contentions from Clearwater and Riverkeeper (those presuming the Rule is invalid), the environmental contention CW-EC-8/RK-EC-6 alleges:

> The environmental analysis carried out to assess the potential impacts of relicensing Indian Point Units 2 and 3 is inadequate because it provides an insufficient analysis of the potential impacts of generating more spent fuel leading to additional waste storage on site, the alternative methods of accomplishing such storage, and potential alternatives to additional waste storage on the site, including the no-action alternative.[165]

The safety contention, CW-SC-2/RK-TC-3 alleges:

> The license renewal application requesting the relicensing of Indian Point Units 2 and 3 is inadequate because it provides insufficient analysis of the aging management of the dry casks and spent fuel pools that could be used to store waste on the site in the long term. In addition, both the application and the NRC Staff have failed to establish that any combination of such storage will provide adequate protection of safety over the long term.[166]

In the event that the Board finds the Waste Confidence Rule valid, CW-EC-9/RK-EC-7 asserts as an environmental contention that:

> The environmental analysis carried out to assess the potential impacts of relicensing Indian Point Units 2 and 3 is inadequate because it provides an insufficient analysis of the potential impacts of generating more spent fuel during the period commencing 60 years after the expiration of each license. Missing elements include analysis of: a) the long term impact of additional waste storage on site; b) the alternative methods of accomplishing such storage; and c) potential alternatives to additional waste storage on the site, including the no-action alternative.[167]

As a safety contention, CW-SC-3/RK-TC-4 asserts:

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[164] CW-RK Joint Contentions at 17.

[165] Id.

[166] Id. at 18.

[167] Id.

> The license renewal application requesting the relicensing of Indian Point Units 2 and 3 is inadequate because it provides insufficient analysis of the aging management of the dry casks and spent fuel pools that could be used to store waste on the site during the period commencing 60 years after the date the license expires at each unit. In addition, both the applicant and the NRC Staff have failed to establish that any combination of such storage will provide adequate protection of safety over the long term.[168]

Entergy and NRC Staff express numerous reasons for opposing the admission of Clearwater's and Riverkeeper's joint contentions relating to the on-site storage of spent fuel. As threshold matters, both parties argue that the safety contentions (i.e., CW-SC-2 /RK-TC-3 and CW-SC-3/RK-TC-4) were not timely filed, that these contentions challenge NRC regulations, and that portions of Clearwater's and Riverkeeper's Reply, which includes a waiver petition/exemption request, should be stricken from the record.[169] For reasons discussed below, we find that the contentions were timely and that Entergy's Motion to Strike portions of the Intervenors' Reply should be denied. Nevertheless, none of these new contentions filed jointly by Clearwater and Riverkeeper is admissible because they are, inter alia, direct challenges to the agency's regulations.

Following a discussion of timeliness and Entergy's Motion to Strike, the admissibility of these contentions is reviewed starting with CW-EC-8/RK-EC-6 and CW-SC-2/RK-TC-3, followed by CW-EC-9/RK-EC-7 and CW-SC-3/RK-TC-4.

1. Timeliness

Timeliness is a threshold that must be cleared for any proffered new or amended contention.[170] Clearwater's and Riverkeeper's joint contentions — based on the impact of the Commission's recent update to its Waste Confidence Decision (WCD Update)[171] — were filed

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[168] Id.

[169] See generally NRC Staff Answer to Entergy Motion to Strike; Entergy Motion to Strike; Entergy Answer to CW-RK Joint Contentions at 12-26; NRC Staff Answer to CW-RK Joint Contentions at 19-35.

[170] See 10 C.F.R. § 2.309(c)(1), (f)(2); July 1, 2010 Scheduling Order at para. F.2.

on January 24, 2011, which is within thirty days after the publication date of the Commission's final WCD Update on December 23, 2010. In this updated Rule, the Commission addressed both the safety and environmental aspects of spent fuel storage in making "a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life for operation."[172] Contrary to both Entergy's and the NRC Staff's position that the safety contentions (i.e., CW-SC-2/RK-TC-3 and CW-SC-3/RK-TC-4) are untimely,[173] the contentions addressing the WCD Update meet the thirty day deadline in our July 1, 2010 Scheduling Order,[174] they were filed within thirty days of the publication of the WCD Update, and are therefore timely inasmuch as they have arisen from information in the WCD Update.

2. Entergy Motion to Strike Portions of Clearwater's and /Riverkeeper's Reply

Entergy has moved first to strike all of the Gundersen and Greene Declarations and Waiver Petition/Exemption Request that Clearwater and Riverkeeper attached to their Reply to Entergy's and NRC Staff's Answers to their Joint Contentions, as well as other portions of their Reply dealing with selected safety issues of spent fuel storage addressed in CW-SC-2/RK-TC-3 and CW-SC-3/RK-TC-4.[175] The NRC Staff supports Entergy's Motion.[176] Entergy alleges that Clearwater's and Riverkeeper's Reply and Gundersen Declarations (that present technical disputes with the Entergy's aging management of spent fuel storage are new arguments and an

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[171] Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, 75 Fed. Reg. 81,032 (Dec. 23, 2010).

[172] Id. at 81,036; see also 10 C.F.R. § 51.23(a).

[173] Entergy Answer to CW-RK Joint Contentions at 3, 16-18, 23; NRC Staff Answer to CW-RK Joint Contentions at 19-20, 32-35.

[174] July 1, 2010 Scheduling Order at para. F.2.

[175] Entergy Motion to Strike at 6-10.

[176] See NRC Staff Answer to Entergy Motion to Strike at 7.

"impermissible attempt to cure the deficiencies in Petitioners' safety contentions."[177] On the opposite end of the spectrum, the Intervenors maintain that it is appropriate for them to "amplify" issues presented in the original contention without qualification.[178]

The purpose of a reply is to allow a petitioner to respond to an opposing party's legal and factual arguments raised in its answer to proposed contentions. A reply cannot be used to expand the scope of the contention, but instead "must focus narrowly on the legal or factual arguments first presented in the original petition or raised in the answers to it."[179]

Statements acceptable for replies must meet two criteria: (1) they must be within the scope of the contention as originally filed, and (2) they must address factual or legal statements raised in the opposing parties' answers. However, in its Motion to Strike, Entergy, supported by NRC Staff, seeks to broaden the criteria to include a prohibition against all new arguments.[180] Entergy does note that, because it is not allowed to respond to a reply, "principles of fairness mandate that a petitioner restrict its reply brief to addressing issues raised by the Applicant's or the NRC Staff's Answers."[181] While this point is valid, it falls well short of prohibiting a petitioner from raising all new arguments. As long as new statements are within the scope of the initial contention and directly flow from and are focused on the issues and arguments raised in the Answers, fairness is achieved through the consideration of these newly expressed arguments.

In this instance, Entergy argues that portions of Intervenors' Reply "contains new arguments and relies on new factual information, including the Gundersen Declaration, that was not submitted with the New Contentions," and that "for the first time, reference and attempt to raise technical disputes with certain portions of Entergy's aging management program for the

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[177] Entergy Motion to Strike at 7.

[178] CW-RK Answer to Entergy Motion to Strike at 4-5.

[179] Nuclear Mgmt. Co., LLC (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006).

[180] See Entergy Motion to Strike at 5; NRC Staff Answer to Entergy Motion to Strike at 4.

[181] Entergy Motion to Strike at 5.

Indian Point spent fuel pools."[182] Entergy goes on to challenge Intervenors' citation of NRC Information Notice 2009-26 with the position that this document was new information that was first referenced in the Intervenors' Reply.[183]

Neither Entergy nor NRC Staff has provided any support showing that the Intervenors' statements are not within the scope of the original contention or that the information does not address issues raised in Entergy's and the NRC Staff's Answers. While the arguments relating to the safety contention in Clearwater's and Riverkeeper's Reply are more focused than in their original contention, they are consistent with the statement of the contention and acceptable as counterpoint to the Answers provided by Entergy and the NRC Staff.[184] Specifically, the original contention addresses the adequacy of aging management of the dry casks and spent fuel pools,[185] allegations that were challenged by the Applicant and NRC Staff in their Answers.[186] Therefore, Energy's Motion to Strike these portions of the Petitioner's Reply is denied.[187]

Second, Entergy, supported by NRC Staff, also moves to strike Clearwater's and Riverkeeper's Motion for exemption to, or waiver from, the rules as applied to the Intervenors' position that the updated Waste Confidence Rule is invalid (as expressed in CW-EC-8/RK-EC-6

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[182] Id. at 6.

[183] Id. at 6-7.

[184] We note that this case is distinguishable from such cases as Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 428-29 (2003) (internal citations omitted), where the intervenors attempted to add new bases or new issues that "'simply did not occur to [them] at the outset.'" See also Louisiana Energy Serv., L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224-25 (2004) (rejecting attempt to raise new claims for the first time in reply brief).

[185] See CW-RK Joint Contentions at 18.

[186] Entergy Answer to CW-RK Joint Contentions at 16-26; NRC Staff Answer to CW-RK Joint Contentions at 28-35.

[187] Allegations by Entergy and NRC Staff that the Intervenors failed to address the criteria in 10 C.F.R. § 2.309(c)(1) and (f)(2) are irrelevant because statements in the Intervenors' Reply do relate to the opposing parties' Answers and are therefore neither new nor untimely filed.

and CW-SC-2/RK-TC-3), including the supporting Declarations of Greene and Gundersen.[188] Clearly, the Intervenors are raising a new strategy in their Reply that was not part of these original contentions and that does not respond to issues raised in Entergy's or the NRC Staff's Answers.[189] The merits of this Motion for exemption and waiver and the attached declarations are discussed as an independent Motion in the following section.

C. CW-EC-8/RK-EC-6 and CW-SC-2/RK TC-3 Admissibility and Exemption/Waiver Request Denial

In Clearwater's and Riverkeeper's CW-EC-8/RK-EC-6 and CW-SC-2/RK-TC-3, they have effectively repeated the same arguments that Clearwater advanced in its earlier petition for EC-7 and SC-1 relating to inadequacies in the Indian Point environmental analysis and aging management review for long-term spent fuel storage based, in part, on Commission action on its draft WCD Update.[190] Here, they are referring to the same inadequacies due to the invalidity of the final WCD Update's sidestepping of the statutory mandate of NEPA.[191]

As a result of its review of Clearwater's previous petition for EC-7 and SC-1, this Board certified the question to the Commission as to "whether the Waste Confidence Rule remain[ed] viable despite the Administration's decision to abandon Yucca Mountain."[192] In its response to our certification, the Commission emphasized that, in regard to onsite storage of spent fuel, it "'has chosen to proceed generically' through the rulemaking process – that is, the Waste

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[188] Entergy Motion to Strike at 8-10; NRC Staff Answer to Entergy Motion to Strike at 5-6.

[189] While referencing this Motion in their Reply and filing it at the same time as their Reply to Entergy's and the NRC Staff's Answers, Clearwater and Riverkeeper submitted this request as a separate filing. See CW-RK Waiver/Exemption Petition.

[190] Hudson River Sloop Clearwater, Inc.'s Motion for Leave to Add a New Contention Based Upon New Information (Oct. 26, 2009); see also CLI-10-19, 72 NRC __, __ (slip op.) (July 8, 2010); Licensing Board Memorandum and Order (Certification to the Commission of a Question Relating to the Continued Viability of 10 C.F.R. § 51.23(b) Arising From Clearwater's Motion for Leave to Admit New Contentions) (Feb. 12, 2010) (unpublished) [hereinafter Licensing Board Certification Memorandum and Order].

[191] CW-RK Joint Contentions at 17-18.

[192] Licensing Board Certification Memorandum and Order at 26.

Confidence Rule, codified at 10 C.F.R. § 51.23 – instead of litigating issues case-by-case in adjudicatory proceedings."[193] As we have previously noted, it has been the "clear guidance . . . [from the Commission] that challenges to the Waste Confidence Rule must be made in the context of a rulemaking, not in the context of an adjudicative proceeding."[194] The Commission also reiterated its position that: (1) it would not be productive and would be contrary to longstanding policy to litigate the impacts of on-site storage of spent fuel when these issues can be resolved generically, and (2) if Intervenors are dissatisfied with this generic approach, their relief cannot be addressed through adjudication but rather through the rulemaking process.[195]

The update to the generic assessment for spent fuel storage has now been completed and the ban against raising issues associated with the storage of spent fuel remains. The WCD Update includes a position of confidence that spent fuel can be stored safely and without significant environmental impacts. The Intervenors' allegations in CW-EC-8/RK-EC-6 and CW-SC-2/RK-TC-3 that the WCD Update is invalid are a direct challenge to an NRC rule (i.e., the WCD Update as manifested by 10 C.F.R. § 51.23), thus rendering these contentions inadmissible pursuant to 10 C.F.R. § 2.335(a).[196]

In conjunction with their Reply to the Answers filed by Entergy and the NRC Staff, Clearwater and Riverkeeper seek either an exemption from regulations pursuant to 10 C.F.R. § 51.6 or a waiver of the regulations in accordance with 10 C.F.R. § 2.335(b) for CW-EC-8/RK-EC-6 and CW-SC-2/RK-TC-3.[197] We have said that we will use a multitude of factors in evaluating the timeliness of a waiver petition, inter alia, the nature of the petition and "the time

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[193] CLI-10-19, 72 NRC at __ (slip op. at 2).

[194] Licensing Board Certification Memorandum and Order at 22.

[195] CLI-10-19, 72 NRC at __ (slip op. at 3).

[196] See Licensing Board Certification Memorandum and Order at 22, app. A.

[197] See CW-RK Waiver/Exemption Petition at 2-10.

elapsed between when the petitioner learned of the matters that gave rise to the request and when the petition is filed."[198]

We deny Clearwater's and Riverkeeper's Exemption/Waiver Petition as untimely because it was not submitted with these contentions when they were originally filed, as it could and should have been, without any explanation for the late filing.

Specifically, this exemption/waiver was not sought until after Intervenors received the Answers filed by Entergy and the NRC Staff. The Intervenors should have recognized the need in their initial filing for an alternative procedure that requests an exemption or rule waiver or exemption for admission of CW-EC-8/RK-EC-6 and CW-SC-2/RK-TC-3, and that it would be unfair to raise the same issue in a waiver petition or exemption request for the first time in a reply without affording opposing parties an opportunity to respond to what are common issues among the waiver petition, the exemption request, and the contentions.

Even ignoring the untimely nature of this Exemption/Waiver Petition, Clearwater and Riverkeeper have not established the legal basis for the granting of an exemption from 10 C.F.R. § 51.23(b) using the provisions of 10 C.F.R. § 51.6. For the Board to accept the argument proffered by the Intervenors, it would make the waiver provisions of 10 C.F.R. § 2.335 superfluous, and we must read the exemption regulation in pari materia with the waiver regulation. We conclude that 10 C.F.R. § 51.6 should not to be used in the admission of contentions in an adjudicatory proceeding (but instead reserved for an applicant's relief from regulatory requirements), in light of the option concurrently available to a purportedly aggrieved petitioner for waiver pursuant to 10 C.F.R. § 2.335.

In support of their waiver request, Clearwater and Riverkeeper repeat the same arguments they make in their contentions, without demonstrating site-specific circumstances at Indian Point that warrant granting the waiver of the regulation set out at 10 C.F.R. § 51.23(b). In

[198] Licensing Board Memorandum and Order (Scheduling Prehearing Conference and Ruling on New York State's Motion Requesting Consideration of Additional Matters) (Dec. 18, 2008) at 4 (unpublished).

our view, the issues raised by the Intervenors apply to all nuclear reactor sites. Based on this, we find that Clearwater and Riverkeeper have not made a prima facie showing that application of 10 C.F.R. § 51.23(b) would not serve its intended purpose at Indian Point.[199]

Also, we find that it would be redundant to ask the Commission to again look at the same question here that it addressed in CLI-10-19 for Clearwater's Contentions EC-7 and SC-1. Earlier in this proceeding, the Commission, consistent with precedent, reiterated that the environmental and safety impacts of waste storage are not to be addressed in a license renewal proceeding.[200] Its most recent position (as expressed in CLI-10-19), while written to address our certification for Clearwater's Contentions EC-7 and SC-1, applies equally to the decision that must be reached on the new contentions. Stated another way, the issues that would be reviewed should a prima facie case be found in the instant waiver request, have already been addressed by the Commission in CLI-10-19.

In summary, we (1) hold that CW-EC-8/RK-EC-6 and CW-SC-2/RK-TC-3 are inadmissible, (2) deny, for lateness and lack of authority, Clearwater's and Riverkeeper's request for an exemption of the rules in accordance with 10 C.F.R. § 51.6, and (3) in addition to being untimely, find that the Intervenors have not made a prima facie showing that the application of 10 C.F.R. § 51.23(b) would not serve its intended purpose and, accordingly, conclude that a waiver should not be granted.

D. CW-EC-9/RK-EC-7 and CW-SC-3/RK-TC-4 Admissibility

The remaining contentions relating to the WCD Update, CW-EC-9/RK-EC-7 and CW-SC-3/RK-TC-4, also challenge the Rule, but are specifically applied to an alleged gap (i.e., the period after sixty years from license expiration) in the environmental and safety analyses for the long-term storage of spent fuel at Indian Point.

1. Alleged "Gap" in the Waste Confidence Decision Update

[199] See 10 C.F.R. § 2.335(c)-(d).

[200] CLI-10-19, 72 NRC at __ (slip op. at 3).

The heart of the Intervenors' arguments in CW-EC-9/RK-EC-7 and CW-SC-3/RK-TC-4 lies in their opinion that a gap in the scope of Section 51.23(a) emerged with the promulgation of the WCD Update on December 23, 2011. The Intervenors maintain that the gap exists because the Commission's revised generic determination of no significant impact is limited to a sixty-year timeframe following the period of cessation of operations including any extension associated with the period of license renewal.[201]

Contrary to this position, the updated 10 C.F.R. § 51.23(a) states that the Commission generically determined "that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life for operation" and "believes there is reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary."[202] The modifiers "at least," and, "when necessary," in the final rule negate any allegation of a gap in the regulatory timeframe covered by the WCD Update and the environmental assessment supporting that decision.

It is correct that the Commission only considered sixty years of storage beyond the license renewal period in its generic safety and environmental determinations in the WCD Update. But, consistent with historic practice, the Commission has stated that it will revisit the Waste Confidence Rule as this time frame is approached.[203] And, no matter how Clearwater and Riverkeeper try to communicate their arguments, the fact still remains that the Commission has expressed confidence that a geologic repository will be available when necessary, that waste can be stored safely and without significant environmental impacts for at least sixty years beyond the term of a renewed license, and that the Commission will revisit its decision, as it has

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[201] CW-RK Joint Contentions at 33.

[202] 10 C.F.R. § 51.23(a) (emphasis added).

[203] 75 Fed. Reg. at 81,035.

done in the past, if it appears that this timeframe will expire. Nothing in this approach indicates a gap in the time period addressed by the WCD Update.

2. Specific NEPA-Related Issues of CW-EC-9/RK-EC-7

Clearwater's and Riverkeeper's proposed NEPA contentions CW-EC-9/RK-EC-7 allege that the environmental analysis of impacts from relicensing of IP2 and IP3 is inadequate because that analysis only applies to the sixty-year period after the end of the license renewal period. As noted above, the Commission has expressed its view that a repository will be available when necessary and that the WCD will be revisited as the sixty-year period nears its end.

Furthermore, the update left intact the statement in Section 51.23(b) that, within the scope of the generic determination in paragraph (a) of that regulation,

> no discussion of any environmental impact of spent fuel storage . . . is required in any environmental report, environmental impact statement, environmental assessment or other analysis prepared in connection with the issuance or amendment of an operating license for a nuclear power reactor under parts 50 and 54 of this chapter.[204]

The Environmental Assessment (EA) supporting the finding of no significant impact for the additional thirty-year period is part of this WCD Update.[205] Based on this, any challenge to the WCD Update is a direct challenge to NRC regulations and, accordingly, is not within the scope of this license renewal proceeding for IP2 and IP3. This holding is consistent with the Commission's recent decision on similar contentions from Clearwater (EC-7 and SC-1).[206]

The Intervenors maintain that the exclusion in Section 51.23(b) "is limited to the scope of 51.23, which in turn is limited to 60 years after license expiration."[207] Nevertheless, the fact

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[204] 10 C.F.R. § 51.23(b).

[205] 75 Fed. Reg. at 81,033.

[206] See CLI-10-19, 72 NRC at __ (slip op. at 2-3).

[207] CW-RK Joint Contentions Reply at 11.

remains that the Commission has expressed confidence that a geologic repository will be available when necessary and that waste can be stored safely and without significant environmental impacts for at least sixty years beyond the term of a renewed license. As stated supra, any challenges to the Commission's WCD Update must be addressed through rulemaking. It cannot be attacked in this license renewal proceeding.[208]

Clearwater and Riverkeeper note that the Commission "has directed the Staff to assess the environmental impact of long term storage for up to 120 years," and thus claim that this assessment must be performed on a site-specific basis prior to issuance of an extended license for Indian Point.[209] However, the Commission directed this study so that it will have timely information to assess the possible need for adjustments to its WCD as the end of the sixty-year period approaches.[210] Because there is no gap in the current WCD Update, the Commission has found no need to complete this study at this time. As Clearwater and Riverkeeper acknowledge,[211] the Commission's WCD has been under constant review for decades and continues to be an ongoing, evolving process. We conclude that the recent initiation of this assessment of the impacts of such long-term storage has no bearing on this license renewal proceeding.

New York supported CW-EC-9/RK-EC-7, using similar arguments to those expounded by Clearwater and Riverkeeper, including the need to assess the safety and environmental assessment of spent fuel storage for the post-sixty year period.[212] New York argues that 10 C.F.R. § 51.23(b) "does not bar Clearwater['s] and Riverkeeper's contentions" because "the

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[208] CLI-10-19, 72 NRC at __ (slip op. at 3).

[209] CW-RK Joint Contentions at 39.

[210] 75 Fed. Reg. at 81,035.

[211] Cf. CW-RK Joint Contentions at 12-16.

[212] New York Answer to CW-RK Joint Contentions at 7.

period following the term of the reactor operating license or amendment" and "within the scope of the generic determination in paragraph (a) of this section" from Section 51.23(b) refer to the sixty-year period stated in 10 C.F.R. § 51.23(a),[213] and the failure of the NRC Staff to complete the analysis for the FSEIS beyond that period is a violation of NEPA and the Atomic Energy Act (AEA).[214]

As with Clearwater's and Riverkeeper's position, New York's arguments are negated by the Commission's finding that a waste repository will be available when necessary and that the Commission will continue to reassess its WCD Update as the sixty-year period nears an end. Clearwater's and Riverkeeper's contentions are not admissible because they constitute a direct challenge to NRC regulations and are thus not within the scope of this proceeding.[215]

New York notes that NRC Staff "relies on the wrong version of 10 C.F.R. § 51.23 to assume that a high level waste repository will be available by 2025, even though NRC Staff knew full well that the rule would be changed within days of the FEIS's issuance."[216] While this assertion might be true, given that neither Entergy nor the NRC Staff chose to address this claim in their Answers and the chronology given by New York is plausible, it was not cited by Clearwater and Riverkeeper in their original contention. For New York to raise it now, it should have addressed the requirements for timely filings presented in 10 C.F.R. § 2.309(f)(2), and, if needed, timely filings in 10 C.F.R. § 2.309(c).

E. Specific Safety-Related Issues of CW-SC-3/RK-TC-4

This safety related contention alleges that the LRA is inadequate because it provides insufficient analysis of the aging management of the dry casks and spent fuel pools that could

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[213] Id. at 10 (emphasis added).

[214] Id. at 11-22.

[215] See 10 C.F.R. §§ 2.335(a), 2.309(f)(1)(iii).

[216] Id. at 17.

be used during the post-sixty-year period after the license renewal term. Most of Clearwater's and Riverkeeper's discussion relating to this safety contention is a repeat of the arguments they presented for their NEPA-related contentions dealing with issues commencing sixty years after the license renewal period. In dealing with the safety of spent fuel storage, this contention is inadmissible as a direct challenge to the WCD Update[217] and, in derogation of 10 C.F.R. § 2.309(f)(1)(iii), is not within the scope of this license renewal proceeding .

In their Joint Motion for Leave to file these contentions, Clearwater and Riverkeeper make numerous allegations attacking the adequacy of the Commission's WCD Update that they contend apply to both the Motion's NEPA- and safety-related issues, including the NRC's allegedly inappropriate reliance on the WCD, the Commission's alteration of part of the Waste Confidence Rule, and the need for the NRC, as part of its license renewal review in this proceeding, to complete additional site-specific review for the post-sixty-year period.[218] In a broad fashion, Clearwater and Riverkeeper attempt to justify the timeliness of the contentions by pointing out that the WCD Update is new and significant information, to discuss how the new contentions are within the scope of license renewal, and to provide general examples of "multiple material disputes" raised by these allegations.[219] All of these positions are presented by these Intervenors as overarching issues applicable to both their NEPA- and safety-related contentions.

However, how these arguments relate to their contention that Entergy has not provided sufficient analysis of aging management for the long-term storage of spent fuel is not adequately explained. Clearwater and Riverkeeper have not provided any specific allegations addressing the adequacy of Entergy's aging management of these storage alternatives for the license renewal period. In fact, the Intervenors fail to mention the components of the spent fuel

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[217] See 10 C.F.R. § 2.335(a).

[218] See CW-RK Joint Contentions at 18-40.

[219] Id. at 40-47.

pool that have been discussed in Entergy's AMP.[220] Nor, as NRC Staff points out, did they cite any regulation that requires the aging management program to be extended more than sixty years after the term of the license when all other systems, structures, and components need only address aging management for the term of the license extension.[221] As a result, the Intervenors have failed to provide support for why these arguments have any bearing on the required safety analysis of aging management required for license renewal.

F. Board Decision

The WCD Update has examined the safety and environmental impacts of on-site storage of spent fuel pending final off-site disposal, rendering it inappropriate for license renewal proceedings to litigate this issue. Accordingly, we find that Clearwater's and Riverkeeper's proposed contentions CW-EC-8/RK-EC-6, CW-SC-2/RK-TC-3, CW-EC-9/RK-EC-7, and CW-SC-3/RK-TC-4 are direct challenges to NRC regulations and are therefore outside the scope of this license renewal proceeding for IP2 and IP3 pursuant to 10 C.F.R. § 2.309(f)(1)(iii). Accordingly, these proposed contentions are inadmissible.

VIII. AMENDED CW-EC-3 (CW-EC-3A)

A. Procedural Background

We admitted Clearwater EC-3 (CW-EC-3) to the extent it claimed "that Entergy's ER [was] deficient because it d[id] not supply sufficient information from which the Commission [could] properly consider, and publicly disclose, environmental factors that may cause harm to

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[220] See Entergy Answer to CW-RK Joint Contentions at 21 (referencing Indian Point Energy Center License Renewal Application Technical Information at tbls. 3.3.2-1, 3.5.2-3 (Apr. 2007) [hereinafter LRA AMP]); NRC Staff Answer to CW-RK Joint Contentions at 30-31 (referencing LRA AMP at tbl. 3.5.2-3).

[221] NRC Staff Answer to CW-RK Joint Contentions at 31 (referencing 10 C.F.R. § 50.54(bb)).

minority and low-income populations that would be 'disproportionate to that suffered by the general population.'"[222]

On February 3, 2011, Clearwater moved to amend and extend CW-EC-3.[223] Clearwater's proposed amendment, labeled herein as CW-EC-3A, first alleges that "Entergy's Environmental Report and the Final Supplemental Environmental Impact Statement contain seriously flawed environmental justice [EJ] analyses that do not adequately assess the impacts of relicensing Indian Point on the minority, low-income and disabled populations in the area surrounding Indian Point."[224] Clearwater framed this claim as a "technical change" to the admitted CW-EC-3, in that it adds to the admitted contention the charge that the FSEIS's discussion of EJ is deficient for its reliance on a generic analysis and its failure to look at the impact from emergency planning on EJ populations.[225]

In addition, for the first time CW-EC-3A alleges that "the assessment of the impact of the no-action alternative on potentially affected environmental justice populations is inadequate," and that "the assessment of the impact of adding closed cycle cooling on air quality and on potentially affected local environmental justice populations is inadequate."[226] According to

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[222] LBP-08-13, 68 NRC at 201 (citing Sys. Energy Res., Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-05-04, 61 NRC 10, 13 (2005)).

[223] Motion for Leave to Amend and Extend Contention EC-3 Regarding Environmental Justice and Petition to Do So (Feb. 3, 2011) [hereinafter Amended CW-EC-3]. On March 7, 2011, Entergy and the NRC Staff filed Answers supporting in part and opposing in part the amendment of CW-EC-3. Applicant's Answer to Hudson River Sloop Clearwater, Inc.'s Amended Environmental Justice Contention (Mar. 7, 2011) [hereinafter Entergy Answer to Amended CW-EC-3]; NRC Staff's Answer to Amended and New Contention (EC-3) Filed by Hudson River Sloop Clearwater, Inc. Concerning the Final Supplemental Environmental Impact Statement (Mar. 7, 2011) [hereinafter NRC Staff Answer to Amended CW-EC-3]. Clearwater replied to Entergy's and the NRC Staff's Answers on March 21, 2011. Combined Reply to NRC Staff and Entergy's Answers in Opposition to Clearwater's Motion for Leave and Petition to Amend Contention EC-3 (Mar. 21, 2011) [hereinafter Amended CW-EC-3 Reply].

[224] Amended CW-EC-3 at 15 (emphasis in original omitted).

[225] See id. at 3, 19.

[226] Id. at 16.

Clearwater, these new claims regarding the impacts of the no-action alternative, and from adding closed-cycle cooling, arise because the NRC did not independently evaluate comments to the DSEIS made by organizations supportive of relicensing Indian Point. Clearwater claims these groups are funded by Entergy and exaggerate the negative air quality impacts from the no-action alternative.[227]

Entergy does not oppose the admission of CW-EC-3A to the extent it updates claims made on Entergy's ER to the FSEIS, but states its opposition to the admission of any claims regarding emergency planning impacts on EJ populations.[228] Moreover, because it represents that the data or conclusions in the FSEIS do not differ significantly from those in the DSEIS, Entergy contends that Clearwater's amendments regarding the no-action alternative and closed-cycle cooling are not timely filed.[229] Entergy also maintains that additional scrutiny of the no-action alternative's impact on EJ populations is immaterial to the NRC's licensing decision in this proceeding given that the FSEIS already concludes that those impacts would be small to moderate.[230] Similarly, Entergy urges the Board to view CW-EC-3A as having neither the requisite support "indicating how or why [the FSEIS's analysis of the no-action alternative] should have been conducted differently" nor showing "why the air quality impacts from closed cycle cooling would fall disproportionately on minority or low-income populations."[231] Lastly, Entergy maintains that the no-action and closed-cycle cooling alternatives do not raise genuine disputes with the FSEIS because the FSEIS has satisfactorily addressed the comments made on the DSEIS. Also, Entergy argues that Clearwater has not challenged the analysis and

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[227] See id. at 3-10, 20-22.

[228] Entergy Answer to Amended CW-EC-3 at 9-10.

[229] Id. at 11-13, 19-20.

[230] Id. at 14-15.

[231] Id. at 16-21.

conclusions reached in the FSEIS, has not explained why minority populations would disproportionately be affected by impacts compared to the general population, and has not demonstrated that the NRC Staff has failed to reach its conclusions independently.[232]

The NRC Staff agrees with Entergy regarding CW-EC-3A inasmuch as it updates Clearwater's challenges to the ER to the FSEIS and objects to Clearwater raising any concerns over emergency planning.[233] However, the NRC Staff characterizes Clearwater's challenges to the FSEIS's no-action alternative analysis as untimely, as failing to raise a material dispute with the FSEIS, as an incorrect reading of the FSEIS, and as too vague to be admissible.[234] Further, the NRC Staff describes the closed-cycle cooling aspect of CW-EC-3A as unsupported, immaterial to the NRC's licensing decision, and based on an erroneous reading of the FSEIS.[235]

Clearwater replies that CW-EC-3A is timely filed because Section 2.309(f)(2) permits amended contentions to be filed based on the FSEIS, even if an intervenor has not challenged similar data or conclusions in the DSEIS, and that the information giving rise to the contention was presented for the first time in the FSEIS.[236] In the alternative, Clearwater asserts that it has shown good cause, pursuant to Section 2.309(c)(1), to have filed this amended contention when it did, because it could not have anticipated that Entergy would encourage various organizations to submit comments on the DSEIS, and that the NRC Staff would inadequately respond to those comments.[237]

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[232] Id. at 16-18, 21-22.

[233] NRC Staff Answer to CW-EC-3 at 8-9.

[234] Id. at 9-18.

[235] Id. at 19-21.

[236] Amended CW-EC-3 Reply at 3-6, 9-10.

[237] Id. at 6-9.

Further, Clearwater argues that CW-EC-3A raises a material issue in this proceeding because its criticisms of the FSEIS's no-action and closed-cycle cooling alternative analyses show that the NRC Staff has failed to reach any conclusions of the impact of these alternatives on EJ populations.[238] According to Clearwater, given that the FSEIS does not appropriately respond to those comments on this issue made in response to the DSEIS and provide the NRC Staff's own information to address them, Entergy's "manipulat[ion of] the comment process" led the NRC Staff to insufficiently analyze the adverse impacts from the no-action and closed-cycle cooling alternative to the same EJ populations alleged to be represented by these commenters.[239]

Finally, Clearwater contends that CW-EC-3A does not challenge Entergy's emergency planning. Instead, Clearwater states that it is attacking the NRC "Staff's failure to analyze mitigation for the disparate impacts of the proposed action" on EJ populations.[240] These populations include not only the Sing Sing prisoners mentioned by the Board in LBP-08-13, but also other EJ populations within 50 miles of Indian Point[241] in pre-schools, nursing homes, shelters, hospitals, and minority and low-income residents in the region who lack access to private transportation.[242]

B. Board Decision

We admit those portions of CW-EC-3A that seek to update the contention as originally admitted. However, we reject the remainder of the amended contentions on timeliness and materiality grounds.

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[238] Id. at 10-12.

[239] Id. at 12-16.

[240] Id. at 18.

[241] Clearwater references the recent events at the Fukushima Daiichi Nuclear Power Plant and the NRC's recommendation that populations within fifty miles of that facility be evacuated.

[242] Id. at 18-19.

In order to directly challenge facts or conclusions stated in the FSEIS through timely filed new or amended contentions, Clearwater must identify significant differences between the data and conclusions in the DSEIS and the FSEIS.[243] This policy is consistent with the Commission's longstanding and pervasive position that requires intervenors to challenge deficiencies at the earliest possible time.[244] Having chosen not to challenge the DSEIS, Clearwater cannot now directly challenge aspects of the FSEIS that have not differed significantly from the DSEIS.[245]

If, however, a party made comments to the DSEIS that are not adequately addressed in the FSEIS, then the triggering event for a timely challenge would be the publication of the FSEIS. Nevertheless, in this Motion Clearwater did not identify actual deficiencies in the NRC's response to comments. Rather, it challenged the motives of commenters, an issue that is irrelevant. Regardless of the commenters' motives, comments must be addressed by the NRC Staff and any challenge to the NRC Staff's response to a comment must point to errors in how the comment was resolved in the FSEIS. Clearwater, however, did not catalogue the DSEIS comments nor explain why the NRC Staff's responses to them were inadequate.[246]

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[243] 10 C.F.R. § 2.309(f)(2).

[244] Progress Energy Florida, Inc. (Combined License Application, Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-02, 71 NRC __, __ (slip op. at 9) (Jan. 7, 2010) (citing Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1050 (1983)).

[245] 10 C.F.R. § 2.309(f)(2).

[246] See Amended CW-EC-3 at 4 (only alleging that "Clearwater, Riverkeeper, and others pointed out that Section 8.2 of the DSEIS was flawed because it did not consider and analyze new information about various measures that could be taken if the no-action alternative were implemented as compared to the detrimental impact of relicensing the plant. FSEIS at A-153. These omissions were addressed obliquely in the FSEIS, but the NRC failed to adequately address the issue. E.g. FSEIS at A-154.").

Part of the NRC Staff's responsibility in preparing its FSEIS is responding to comments made on the DSEIS.[247] Contentions alleging that the NRC Staff has not fulfilled its obligation to take a hard look in its FSEIS at comments filed on the DSEIS can be within the scope of this proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iii). However, as we stated before, such a contention must also show "why the alleged error or omission is of possible significance to the result of the proceeding," namely, "some significant link between the claimed deficiency and either the health and safety of the public, or the environment."[248]

Clearwater asserts that the NRC Staff did not look hard enough at the potential health impacts of the no-action alternative as stated in comments on the DSEIS from groups purportedly affiliated with Entergy.[249] However, the identity of those groups is irrelevant to whether the NRC Staff has given a hard look at their comments. We are not told why the comments were misleading or how the NRC Staff's analysis of them was deficient, beyond a challenge to the motives of the commenters and unsupported conclusions regarding the accuracy of the comments and the NRC Staff's assessment thereof.

The purpose of the no-action alternative is for the agency to review and allow the public to understand its review of both the positive and negative impacts that would result from remaining with the status quo rather than proceeding with the proposed action.[250] If Clearwater's position in CW-EC-3A was that the actual no-action alternative is more preferable than the NRC Staff's description of the no-action alternative, such a position might lead to a dispute over whether the NRC Staff has incorrectly minimized the benefits or maximized the

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[247] 10 C.F.R. § 51.91(a); Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 224 (2007).

[248] LBP-08-13, 68 NRC at 62.

[249] Amended CW-EC-3 at 3-8.

[250] See Kilroy v. Ruckelshaus, 738 F.2d 1448, 1453 (9th Cir. 1984) (citations omitted) (explaining the objectives of analyzing the no-action alternative).

adverse impacts of the no-action alternative. Instead, Clearwater only asserted that the untrustworthiness of the commenters claiming to represent EJ populations could potentially impact the relicensing decision for IP2 and IP3. Moreover, Clearwater has not pointed to specific impacts potentially flowing to EJ populations in the no-action alternative that have not been addressed by the NRC Staff. Clearwater offers no critique of the NRC's analysis other than to note that it "mirrors Entergy's public relations slogan" and suggests that "the FSEIS should have treated them with great care."[251] Accordingly, Clearwater has neither raised an issue that is material to the NRC's licensing decision in this proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iv) nor alleged any facts or provided expert opinions to controvert the analysis in the FSEIS. Therefore, this aspect of CW-EC-3A is inadmissible.

In addition, Clearwater's expressed concern over the closed-cycle cooling alternative is that the FSEIS's analysis "is both too indeterminate to be useful and entirely dependent on the assertions of Entergy."[252] However, Clearwater has not provided any alleged facts or expert opinion challenging the FSEIS's analysis of the closed-cycle cooling alternative. In its Motion, Clearwater states that it and others commented on the DSEIS, pointing out that the relicensing of IP2 and IP3 would have the potential for disparate impacts on potentially affected EJ populations[253] But Clearwater merely reproduces concerns raised by an engineer, Bill Powers, regarding the Staff's review in the Oyster Creek license renewal proceeding, says that the NRC lacks independent judgment, and asserts (without support) that the NRC Staff did not look hard enough at the air quality impacts from pursuing replacement power costs and their possible

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[251] See Amended CW-EC-3 at 4, 6.

[252] Id. at 9.

[253] Id. at 3.

effect on EJ populations.[254] These vague allegations do not meet the minimal pleading requirements for an admissible contention.[255]

In preparing its FSEIS, the NRC Staff may rely on information submitted by an applicant such as Entergy, as long as that information is independently verified by the NRC Staff.[256] Beyond its bare assertions, Clearwater has not explained why it believes the NRC Staff has failed to conduct such an independent verification in its FSEIS. Therefore, the closed-cycle cooling aspect of CW-EC-3A is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v) and (vi).

In summary, Clearwater's Motion to Amend and Extend CW-EC-3 is granted in part and denied in part. CW-EC-3A is consolidated with CW-EC-3 as CW-EC-3A and is amended to read as follows:

> Entergy's environmental report and the Final Supplemental Environmental Impact Statement contain seriously flawed environmental justice analyses that do not adequately assess the impacts of relicensing Indian Point on the minority, low-income and disabled populations in the area surrounding Indian Point.[257]

IX. RK-EC-8

A. Parties' Positions

On February 3, 2011, Riverkeeper moved to admit Contention EC-8 (RK-EC-8),[258] which contends that the FSEIS is inadequate because it does not "include or consider the assessment

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[254] See id. at 8-10.

[255] See 10 C.F.R. § 2.309(f)(1)(i).

[256] See Sierra Club v. Van Antwerp, 719 F. Supp. 2d 58, 69 (D.D.C. 2010) (stating that "the [Army] Corps [of Engineers] may rely on information submitted by the applicant but must independently verify such information").

[257] Amended CW-EC-3 at 15.

[258] Riverkeeper Inc. Consolidated Motion for Leave to File a New Contention and New Contention Concerning NRC Staff's Final Supplemental Environmental Impact Statement (Feb. 3, 2011) [hereinafter RK-EC-8]. Entergy and the NRC Staff filed answers to RK-EC-8 on March 7, 2011. Applicant's Answer to Riverkeeper, Inc.'s Motion for Leave and New Contention Concerning the Consideration of Endangered and Threatened Aquatic Species (Mar. 7, 2011) [hereinafter Entergy Answer to RK-EC-8]; NRC Staff's Answer to Riverkeeper, Inc.'s Motion for Leave to File a New Contention, and New Contention EC-8 Concerning NRC Staff's Final

of the National Marine Fisheries Service ('NMFS') regarding impacts to endangered species due to incomplete [Endangered Species Act] ESA § 7 consultation procedures."[259] Riverkeeper argues that the NRC cannot grant Entergy's LRA for IP2 and IP3 unless the NRC Staff issues a supplemental EIS "that fully considers the outcome of the consultation process, including NMFS' forthcoming biological opinion."[260] Because the NRC Staff did not complete its consultation with NMFS regarding the shortnose sturgeon (an endangered species) and the Atlantic sturgeon (a candidate for listing as threatened or endangered) prior to issuing the FSEIS, Riverkeeper argues that the NRC's conclusions in the FSEIS were not fully informed by the requisite input from NMFS and thus lacked a hard look as required by NEPA.[261] Riverkeeper also represents that RK-EC-8 is based on new information that differs significantly from information previously available because Riverkeeper had no way of knowing that the NRC Staff would issue its FSEIS without completing ESA consultation with NMFS.[262]

Entergy opposes admission of RK-EC-8, maintaining that RK-EC-8 was not timely filed to the extent it challenges the sufficiency of the NRC Staff's consultation with NMFS because Riverkeeper could have brought this challenge when that consultation began, or earlier in the consultation process before the FSEIS was issued.[263] Even if Riverkeeper's petition is deemed timely, Entergy argues that RK-EC-8 does not raise a genuine dispute on a material issue of law or fact because (1) there is no requirement for the NRC to complete its ESA § 7 consultation

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Supplemental Environmental Impact Statement (Mar. 7, 2011) [hereinafter NRC Staff Answer to RK-EC-8]. Riverkeeper replied on March 14, 2011. Riverkeeper Inc. Combined Reply to NRC Staff and Entergy Answers to Riverkeeper's Motion for Leave to File a New Contention and New Contention Concerning NRC Staff's Final Supplemental Environmental Impact Statement (Mar. 14, 2011) [hereinafter RK-EC-8 Reply].

[259] RK-EC-8 at 1.

[260] Id.

[261] See id. at 7 n.6, 12, 17-18.

[262] See id. at 18-19.

[263] Entergy Answer to RK-EC-8 at 13-14.

with NMFS prior to issuing the FSEIS, (2) the NRC Staff need not supplement the FSEIS once the ESA consultation process is complete, and (3) the NRC Staff has not violated any time restrictions in the preparation of its Biological Assessment (BA).[264]

The NRC Staff also opposes admission of RK-EC-8. First, the NRC Staff represents that it has complied with the ESA even though it issued the FSEIS before completion of consultation with NMFS because "[i]ssuance of the FSEIS does not cause or amount to an 'irreversible or irretrievable commitment of resources,'" and the procedure of issuing the FSEIS before completion of ESA § 7 consultation has been followed by the NRC Staff in another license renewal proceeding.[265] Thus, the NRC Staff, like Entergy, reasons that RK-EC-8 raises no genuine dispute because there is nothing in the ESA or NEPA expressly requiring the NRC Staff to complete its consultation with NMFS before issuance of the FSEIS.[266] Further, the NRC Staff claims that RK-EC-8 is untimely because it challenges information in the NRC Staff's Revised BA and thus could have been raised when the NRC Staff issued its Original BA and DSEIS in December 2008.[267] Likewise, the NRC Staff also considers RK-EC-8 untimely to the extent it challenges the NRC Staff's Revised BA, which was issued in December 2010 after the

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[264] Id. at 14-20.

[265] NRC Staff Answer to RK-EC-8 at 11.

[266] Id. at 12-15. Shortly after Riverkeeper's Reply was filed, the NRC Staff filed a supplement to its Answer to RK-EC-8. This supplement announced that "the expected completion date of formal consultations has been extended to May 15, 2011, and the expected issuance date of NMFS' Biological Opinion has been extended to June 29, 2011, unless further extended." Supplement to NRC Staff's Answer to Riverkeeper, Inc.'s Motion for Leave to File a New Contention, and New Contention EC-8 Concerning NRC Staff's Final Supplemental Environmental Impact Statement (Mar. 16, 2011) at 2 [hereinafter Supplement to NRC Staff Answer to RK-EC-8]. As of the date of this decision, the Board has not been notified that the Biological Opinion has been issued.

[267] Id. at 17-19.

FSEIS, because the Board only extended the normal thirty-day window to file new contentions arising under the FSEIS, not for new contentions arising under the Revised BA.[268]

Riverkeeper replies that the final NEPA document issued by the NRC Staff should have considered the results of the ESA § 7 consultation process.[269] Likewise, Riverkeeper emphasizes that the precedent (both NRC Staff practice and federal caselaw), cited by Entergy and the NRC Staff to demonstrate the appropriateness of the NRC Staff issuing the FSEIS before completion of consultation, is inapposite given the facts of this proceeding.[270] Similarly, Riverkeeper urges the Board not to view the partial consultation already conducted with NMFS and incorporated into the FSEIS as sufficient to satisfy NEPA and ESA because NMFS has not yet drawn conclusions regarding how renewal of the licenses of IP2 and IP3 will impact certain endangered species.[271] Riverkeeper also stresses that federal caselaw interpreting NEPA mandates the issuance of a supplemental EIS for the types of information likely to emerge from NMFS's ultimate conclusions.[272] Finally, Riverkeeper states that Entergy and the NRC Staff have mischaracterized the timeliness of RK-EC-8 because the contention challenges the comprehensiveness of all of the NRC Staff's NEPA review and how the FSEIS's conclusions inadequately incorporate the views of NMFS.[273]

B. Legal Standards Governing the NRC Staff under the ESA and NEPA

The NRC's final decision on a license application must consider the Final Environmental Impact Statement that is issued for a proposed action, along with any comments or

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[268] Id. at 19.

[269] RK-EC-8 Reply at 4-5.

[270] Id. at 5-6, 9-11.

[271] Id. at 6-7.

[272] Id. at 7-8 (citing Marsh v. Oregon Natural Res. Council, 490 U.S. 360, 372 (1989)).

[273] Id. at 13-16.

supplements made to that document.[274] NEPA mandates that the NRC Staff take a "hard look" at the environmental impacts of the proposed action, which is subject to a rule of reason.[275] As part of its review of the environmental impacts of Entergy's LRA for IP2 and IP3, the NRC Staff is obliged to evaluate the "impact of refurbishment and other license-renewal-related construction activities on important plant and animal habitats" as well as "the impact of the proposed action on threatened or endangered species in accordance with the Endangered Species Act."[276] Table B-1 of 10 C.F.R. Part 51 generally expects that nuclear power plant refurbishment or continued operation will not adversely affect endangered species.[277] However, Table B-1 considers the impact to threatened or endangered species a Category 2 issue[278] requiring a site-specific review, and thus it mandates that "consultation with appropriate agencies would be needed at the time of license renewal to determine whether threatened or endangered species are present and whether they would be adversely affected."[279]

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[274] 10 C.F.R. § 51.94.

[275] Southern Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-07, 69 NRC 613, 631 (2009) (referencing Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998); Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 836 (1973)).

[276] 10 C.F.R. § 51.53(c)(3)(ii)(E); see id. § 51.71(a) ("the draft [environmental impact] statement will address [inter alia] . . . the matters specified in § . . . 51.53"); id. § 51.90 ("the NRC staff will prepare a final environmental impact statement in accordance with the requirements in § . . . 51.71 for a draft environmental impact statement").

[277] 10 C.F.R. Part 51, app. B, tbl. B-1.

[278] As we have noted before, Category 1 issues have been resolved by the NRC in the Generic Environmental Impact Statement for License Renewal, and thus are not encompassed in the agency's review of a license renewal application and barred from litigation in adjudicatory proceedings. However, those issues classified as Category 2 issues necessitate site-specific review and are subject to litigation in adjudicatory proceedings. See LBP-08-13, 68 NRC at 67 (citing Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11-12 (2001)).

[279] 10 C.F.R. Part 51, app. B, tbl. B-1.

The NMFS, which is part of the Department of Commerce's National Oceanic and Atmospheric Administration, shares the administration of the consultation function of the ESA with the Fish and Wildlife Service (FWS) of the Department of the Interior.[280] Generally, NMFS has jurisdiction over marine or anadromous species, while FWS has jurisdiction over freshwater and land-based animals.[281]

Section 7(a)(2) of the ESA directs that:

> each Federal agency shall, in consultation with and with the assistance of [NMFS], insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species . . . .[282]

Before engaging in formal consultation with NMFS under ESA § 7(a)(2), an agency may (but does not have to) informally consult with NMFS to aid the agency in deciding whether formal consultation is required. If informal consultation results in the agency deciding, with written concurrence of NMFS, "that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary."[283]

On the other hand, once consultation has commenced, the federal agency and the license applicant are prohibited from "mak[ing] any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate"

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[280] See Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 651 (2007); 50 C.F.R. § 402.01(b); see also Endangered Species Act of 1973 § 3, 16 U.S.C. § 1532(15).

[281] See Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv., 378 F.3d 1059, 1063 n.1 (9th Cir. 2004).

[282] 16 U.S.C. § 1536(a)(2); see 50 C.F.R. § 402.01.

[283] 50 C.F.R. § 402.13(a).

ESA § 7(a)(2).[284] To comply with ESA § 7, "each federal agency shall . . . request of [NMFS] information whether any species which is listed or proposed to be listed may be present in the area of such proposed action."[285] If NMFS advises in the affirmative that there may be species that are listed or proposed to be listed in the area of the proposed action, then the agency must "conduct a biological assessment [BA] for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action."[286] The ESA permits the BA to "be undertaken as part of a Federal agency's compliance with section 102 of [NEPA]."[287] If the BA concludes that the proposed action will affect a listed species, then formal consultation with NMFS is necessary.[288]

After consultation has concluded, NMFS must present to the agency and the applicant its written Biological Opinion (BiOp), which contains

> a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, [NMFS] shall suggest those reasonable and prudent alternatives which [it] believes would not violate [ESA § 7(a)(2)] and can be taken by the Federal agency or applicant in implementing the agency action.[289]

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[284] 16 U.S.C. § 1536(d); 50 C.F.R. § 402.09; see also Bays' Legal Fund v. Browner, 828 F. Supp. 102, 112 (D. Mass. 1993) (holding that the ESA "calls for some judicial discretion to determine whether an agency's decision to proceed with action, prior to the completion of formal consultation with the NMFS, could have 'the effect of foreclosing' alternatives and could, therefore, be considered arbitrary and capricious.").

[285] 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.06(a).

[286] 16 U.S.C. § 1536(c)(1).

[287] Id.; 50 C.F.R. § 402.06(a).

[288] 50 C.F.R. § 402.14(a). However, formal consultation may be excused if the agency, with the concurrence of NMFS, finds that the proposed action will not likely affect the listed species. Id. § 402.14(b)(1).

[289] 16 U.S.C. § 1536(b)(3)(A).

C. Chronological Background of the NRC Staff's ESA Review in this Proceeding

The NRC Staff sent a letter to NMFS in August 2007, inquiring whether there were any endangered or threatened species in proximity to IP2 and IP3 that could be affected by the reactors' relicensing. In October 2007, NMFS responded that it surmised the shortnose sturgeon, an endangered species, and the Atlantic sturgeon, a candidate for threatened or endangered status, were indeed in the vicinity of the reactors and could be affected by their relicensing.[290] The NRC Staff's DSEIS, issued in December 2008, concluded that both species of sturgeon could be adversely affected by the relicensing of IP2 and IP3 and that such impacts could be small to large, but stated that it needed more information before it would be able to define the extent of such impacts.[291] The NRC Staff also included with its DSEIS a specific BA for the shortnose sturgeon due to its status as a listed endangered species.[292]

Because of these expected impacts, the NRC Staff endeavored to initiate formal consultation with NMFS later that month, but in February 2009 that effort was delayed by NMFS, which sought more information about impacts to the shortnose sturgeon from the NRC Staff before agreeing to commence formal consultation.[293] On December 3, 2010, the NRC Staff issued its FSEIS,[294] which ostensibly analyzed the impacts to both shortnose and Atlantic

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[290] See FSEIS at 4-57.

[291] See Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3, Draft Report for Comment, NUREG-1437 (Dec. 2008) at 4-51 to 4-52 [hereinafter DSEIS].

[292] See id., app. E, Biological Assessment of the Potential Effects on Federally Listed Endangered or Threatened Species from the Proposed Renewal of Indian Point Nuclear Generating Plant, Unit Nos. 2 and 3 at E-88 to E-100.

[293] See FSEIS, app. E, Letter from Mary A. Colligan, Assistant Regional Administrator for Protected Resources, United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Region, to David J. Wrona, Branch Chief, U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Program, Division of License Renewal, Projects Branch 2 (Feb. 24, 2009) at E-93 to E-95.

[294] See Letter from Sherwin E. Turk, Counsel for NRC Staff, to Atomic Safety and Licensing Board (Dec. 3, 2010).

sturgeon and concluded they would be small.[295] On December 10, 2010, the NRC Staff submitted its Revised BA for the shortnose sturgeon to NMFS to fulfill NMFS's request for information.[296] As mentioned supra, NMFS has notified the NRC Staff that it expects to complete the consultation process by mid-May 2011, and issue its BiOp by the end of June 2011.[297] As of the date of this decision, the Board has not been notified that the BiOp has been issued.

D. Board Decision

RK-EC-8 alleges that the NRC Staff has failed to complete its formal consultation process with NMFS before issuing its final statement of the environmental impacts of the proposed action, the FSEIS, and that, without the input from NMFS, the NRC Staff was unable to take a hard look at those impacts as required by NEPA.[298]

We disagree with the position that this contention is not timely. First, the NRC says that RK-EC-8 was filed too late because it could have challenged statements made in the NRC Staff's original BA issued in December 2008.[299] However, Riverkeeper had no way of knowing that the NRC Staff would not complete the ESA consultation process before issuing its FSEIS. Given that this fact animates Riverkeeper's challenge to the sufficiency of the NRC Staff's hard look in the FSEIS, we find that it differs significantly from the previously available NEPA documents and thus satisfies 10 C.F.R. § 2.309(f)(2). Second, while much of the NRC Staff's Answer to RK-EC-8 acknowledges Riverkeeper's challenge to the sufficiency of its FSEIS, NRC

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[295] See FSEIS at 4-57 to 4-60.

[296] See Letter from David J. Wrona, Chief, U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Division of License Renewal, Projects Branch 2, to Mary A. Colligan, Assistant Regional Administrator for Protected Resources, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Region (Dec. 10, 2010) (ADAMS Accession No. ML102990043).

[297] See supra note 266, Supplement to NRC Staff Answer to RK-EC-8 at 2.

[298] RK-EC-8 at 17-18.

[299] See NRC Staff Answer to RK-EC-8 at 18-19.

Staff makes the crabbed argument that RK-EC-8 is late-filed because its concurrent basis in the ESA is not the subject of the Board's December 27, 2010 Order extending the time to file new contentions arising only out of the FSEIS.[300] Riverkeeper's legal dispute is that the FSEIS did not take a hard look at the environmental impacts to endangered species by not including the BiOp from NMFS, and Riverkeeper's sought remedy for that deficiency is a supplementation of that FSEIS.[301] We find that RK-EC-8, a challenge to the FSEIS, was timely filed pursuant to 10 C.F.R. § 2.309(f)(2).

NEPA requires that a federal agency "in reaching its decision will have available, and will carefully consider, detailed information concerning significant environmental impacts."[302] While the NRC Staff might have incorporated information from NMFS into the preparation of its FSEIS,[303] those comments do not necessarily reflect the NMFS's final conclusions that will be in its BiOp and only when that document is issued will the NRC Staff have NMFS's complete views to consider in formulating its own recommendations regarding Entergy's LRA.[304]

It is this Board's view that completion of that consultation process is necessary to the NRC Staff's fulfillment of its obligations under the ESA and NEPA. NMFS's BiOp will aid the agency in making its licensing decision in this proceeding. Without receipt and consideration of

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300 See id. at 19.

301 RK-EC-8 at 1, 17-18.

302 Robinson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

303 FSEIS at 4-57.

304 See Tennessee Valley Auth. (Hartsville Nuclear Plant, Units 1A, 2A, 1B, and 2B), ALAB-463, 7 NRC 341, 363-64 (1978) (citing Nat'l Wildlife Fed'n v. Coleman, 529 F.2d 359, 371 (5th Cir.), cert. denied, 429 U.S. 979 (1976) (explaining that although the Commission is ultimately responsible for deciding both whether a proposed agency action does jeopardize endangered species and whether to proceed with the proposed action, a licensing board may not assume that NMFS's BiOp will necessarily come to the same conclusion as the NRC Staff before consultation with NMFS is complete).

that input from NMFS, the NRC Staff arguably has not taken the requisite hard look at this issue.

The FSEIS itself does not beget the final license issuance in this proceeding and therefore its mere issuance without completion of consultation does not necessarily run afoul of the ESA's prohibition on the agency's "mak[ing] any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures" to avoid the likely jeopardizing of the continued existence of any endangered or threatened species or its habitat.[305] Nonetheless, the FSEIS's essential "final analysis and a final recommendation on the action to be taken"[306] must play a fundamental role in the agency's decision in this proceeding on Entergy's LRA.[307]

Specifically, Riverkeeper has raised a question of whether the existing FSEIS fulfills the NRC's hard look obligations under NEPA. Moreover, while the remedy Riverkeeper requests is the supplementation of the FSEIS,[308] a resolution of the question whether a supplemental FSEIS is necessary is a matter for adjudication. Therefore, Riverkeeper's allegation that the NRC Staff's failure to take into account NMFS's BiOp violates the agency's duty to conduct a hard look at the environmental impacts of the proposed action raises a genuine dispute of law pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

Riverkeeper has alleged sufficient facts under 10 C.F.R. § 2.309(f)(1)(v), and provided an adequate factual basis under 10 C.F.R. § 2.309(f)(1)(ii), to support this contention: namely,

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[305] See 16 U.S.C. § 1536(d).

[306] 10 C.F.R. § 51.91(d).

[307] See id. § 51.94.

[308] See RK-EC-8 at 1.

the contents of the FSEIS and the NRC Staff's BA.[309] What is more, because the NRC Staff's environmental review of Entergy's LRA for IP2 and IP3 must include a site-specific review of endangered or threatened species affected by Entergy's LRA as well as consultation with NMFS,[310] that review is within the scope of this license renewal proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iii). Likewise, whether the NRC Staff has taken a hard look at the environmental impacts of the proposed action under the agency's NEPA-implementing regulations is material to the NRC's licensing decision in this proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iv). Therefore, we find RK-EC-8 admissible under 10 C.F.R. § 2.309(f)(1).[311]

X. CONCLUSION

For the foregoing reasons, we:

A. Grant New York's Motion to admit NYS-12C and consolidate it with NYS-12/12A/12B hereinafter as Consolidated NYS-12C;

B. Grant New York's Motion to admit NYS-17B as limited and consolidate it with NYS-17/17A hereinafter as Consolidated NYS-17B; de facto deny New York's Petition for Waiver and Exemption Request from 10 C.F.R. § 51.23 finding it unnecessary to rule thereon;

C. Grant New York's Motion to add additional bases to NYS-25;

D. Grant New York's Motion to Admit NYS-37 as limited by this Memorandum and Order and consolidate it with NYS-9/33 hereinafter as Consolidated NYS-37;

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[309] See RK-EC-8 at 16-17; see also Entergy Answer to RK-EC-8 at 3-6; NRC Staff Answer to RK-EC-8 at 9-10.

[310] See 10 C.F.R. Part 51, app. B, tbl. B-1.

[311] Entergy is correct, however, that its Application to renew the licenses of reactors already built does not qualify as a "major construction activity" necessitating the NRC Staff's preparation of a BA and the time constraints imposed by the ESA for preparation of a BA. See 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12(b)(1); Entergy Answer to RK-EC-8 at 19-20. Thus, to the extent RK-EC-8 challenges the pace the NRC Staff has taken to prepare its BA, that challenge is not material to the NRC Staff's licensing decision in this proceeding pursuant to 10 C.F.R. § 2.309(f)(1)(iv).

E. Grant Riverkeeper's and Clearwater's request to apply RK-EC-3/CW-EC-1 to the FSEIS;

F. Deny Riverkeeper's and Clearwater's Motion to Admit Contentions CW-EC-8/RK-EC-6, CW-SC-2/RK-TC-3, CW-EC-9/RK-EC-7, and CW-SC-3/RK-TC-4; Deny Riverkeeper's and Clearwater's Petition for Waiver of 10 C.F.R. § 51.23; and Deny Entergy's Motion to Strike Portions of Clearwater's and Riverkeeper's Reply Regarding CW-EC-8/RK-EC-6, CW-SC-2/RK-TC-3, CW-EC-9/RK-EC-7, and CW-SC-3/RK-TC-4;

G. Grant Clearwater's Motion to Amend CW-EC-3 as limited to those proposed amendments that update the contention as originally admitted hereinafter as CW-EC-3A; and

H. Grant Riverkeeper's Motion to Admit RK-EC-8.

This Memorandum and Order is subject to interlocutory review in accordance with the provisions of 10 C.F.R. § 2.341(f)(2). A petition for review that meets the requirements of section 2.341(f)(2) must be filed within fifteen (15) days of service of this Memorandum and Order.[312]

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD[313]

/RA/

_____
Lawrence G. McDade, Chairman
ADMINISTRATIVE JUDGE

/RA/

_____
Dr. Kaye D. Lathrop
ADMINISTRATIVE JUDGE

/RA/

_____
Dr. Richard E. Wardwell
ADMINISTRATIVE JUDGE

Rockville, Maryland
July 6, 2011

[312] See 10 C.F.R. § 2.341(b)(1).

[313] Copies of this Memorandum and Order were sent this date by Internet e-mail to: (1) Counsel for the NRC Staff; (2) Counsel for Entergy; (3) Counsel for the State of New York; (4) Counsel for Riverkeeper, Inc.; (5) Manna Jo Green, the Representative for Clearwater; (6) Counsel for the State of Connecticut; (7) Counsel for Westchester County; (8) Counsel for the Town of Cortlandt; (9) Mayor Sean Murray, the Representative for the Village of Buchanan; and (10) Michael J. Delaney, counsel for the City of New York.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON PENDING MOTIONS FOR LEAVE TO FILE NEW AND AMENDED CONTENTIONS) has been served upon the following persons by U.S. mail, first class, or through NRC internal distribution.

Office of Commission Appellate Adjudication
Mail Stop O-7H4M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

U.S. Nuclear Regulatory Commission
Office of the Secretary of the Commission
Mail Stop O-16C1
Washington, DC 20555-0001

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

Administrative Judge
Lawrence G. McDade, Chair

Administrative Judge
Richard E. Wardwell

Administrative Judge
Kaye D. Lathrop
190 Cedar Lane E.
Ridgway, CO 81432

Joshua A. Kirstein, Law Clerk

U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop O-15D21
Washington, DC 20555-0001
Sherwin E. Turk, Esq.
Beth N. Mizuno, Esq.
David E. Roth, Esq.
Brian Harris, Esq.
Andrea Z. Jones, Esq.
Karl Farrar, Esq.
Brian Newell, Paralegal

William C. Dennis, Esq.
Assistant General Counsel
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Andrew M. Cuomo, Attorney General
John J. Sipos, Assistant Attorney General
Janice A. Dean
Assistant Attorney General
Office of the Attorney General
of the State of New York
The Capitol
State Street
Albany, New York 12224

Kathryn M. Sutton, Esq.
Paul M. Bessette, Esq.
Martin J. O'Neill, Esq.
Counsel for Entergy Nuclear Operation, Inc.
Morgan, Lewis & Bockius, LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Joan Leary Matthews, Esq.
Senior Attorney for Special Projects
New York State Department
of Environmental Conservation
625 Broadway, 14th Floor
Albany, New York 12233-5500

Michael J. Delaney, Esq.
Director, Energy Regulatory Affairs
NYC Department of Environmental Protection
59-17 Junction Boulevard
Flushing, NY 11373

Robert D. Snook, Esq.
Office of The Attorney General
State of Connecticut
55 Elm Street
P.O. Box 120
Hartford, CT 06141-0120

Arthur J. Kremer, Chairman
New York Affordable Reliable Electricity
Alliance (AREA)
347 Fifth Avenue, Suite 508
New York, NY 10016

Stephen C. Filler, Board Member
Hudson River Sloop Clearwater, Inc.
724 Wolcott Ave.
Beacon, NY 12508

Sean Murray, Mayor
Kevin Hay, Village Administrator
Village of Buchanan
Municipal Building
236 Tate Avenue
Buchanan, NY 10511-1298

Manna Jo Greene, Environmental Director
Hudson River Sloop Clearwater, Inc.
724 Wolcott Ave.
Beacon, New York 12508

Ross Gould, Board Member
Hudson River Sloop Clearwater, Inc.
270 Route 308
Rhinebeck, NY 12572

Counsel for the Town of Cortlandt
Thomas F. Wood, Esq.
Daniel Riesel, Esq.
Jessica Steinberg, J.D.
Sive, Paget & Riesel, P.C.
460 Park Avenue
New York, NY 10022

Nancy Burton, Esq.
Connecticut Residents Opposed
to Relicensing of Indian Point (CRORIP)
147 Cross Highway
Redding Ridge, CT 06876

Elise N. Zoli, Esq.
Goodwin Proctor, LLP
Exchange Place
53 State Street
Boston, MA 02109

Melissa-Jean Rotini, of counsel
Assistant County Attorney
Office of Robert F. Meehan,
Westchester County Attorney
148 Martine Avenue, 6th Floor
White Plains, NY 10601

FUSE USA
John LeKay
Heather Ellsworth Burns-DeMelo
Remy Chevalier
Bill Thomas
Belinda J. Jaques
351 Dyckman Street
Peekskill, New York 10566

Westchester Citizens' Awareness Network
(WestCan), Citizens Awareness Network,
(CAN), et al
Susan H. Shapiro, Esq.
21 Pearlman Drive
Spring Valley, NY 10977

Philip Musegaas, Esq.
Deborah Brancato, Esq.
Riverkeeper, Inc.
20 Secor Road
Ossining, NY 10562

Richard L. Brodsky, Esq.
Member of Assembly
92nd Assembly District,
State of New York
5 West Main Street
Suite 205
Elmsford, NY 10523

Sarah L. Wagner, Esq.
Legislative Office Building, Room 422
Albany, NY 12248

[Original signed by Christine M. Pierpoint]
Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 6th day of July 2011