

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	Docket Nos. 50-247-LR and
	)	50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.)	
)	
(Indian Point Nuclear Generating Units 2 and 3))	
	)	July 30, 2012

**ENTERGY’S MOTION TO STRIKE PORTIONS OF INTERVENORS’ REVISED
STATEMENT OF POSITION AND MOTION IN LIMINE TO EXCLUDE PORTIONS
OF THE PRE-FILED REBUTTAL TESTIMONY AND EXHIBITS FOR CONTENTION
NYS-26B/RK-TC-1B (METAL FATIGUE)**

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I. INTRODUCTION

Pursuant to 10 C.F.R. §§ 2.1204, 2.319, 2.323, 2.337, and in accordance with the Atomic Safety and Licensing Board’s (“Board”) Scheduling Order of July 1, 2010 (“Scheduling Order”), and subsequent Order dated May 16, 2012,¹ Entergy Nuclear Operations, Inc. (“Entergy”) hereby moves to: (1) strike portions of the State of New York and Riverkeeper, Inc.’s Revised Statement of Position Regarding Consolidated Contention NYS-26-B/RK-TC-1B (“Revised Position Statement”);² and (2) exclude portions of the Prefiled Rebuttal Testimony of Dr. Joram Hopenfled Regarding Contention NYS-26-B/RK-TC-1B – Metal Fatigue (“Rebuttal Testimony”),³ and several other supporting exhibits.⁴

¹ Licensing Board Order (Granting Unopposed Extension of Time) (May 16, 2012) (unpublished).

² See NYS000439.

³ See RIV000114.

⁴ Attachment 1 to this Motion identifies the specific documents or portions thereof that Entergy seeks to exclude from the record. Table A thereof identifies those portions of the Revised Position Statement that should be stricken. Table B thereof identifies those portions of the Rebuttal Testimony that should be excluded from the evidentiary record, and Table C identifies other Riverkeeper exhibits that should be excluded from the evidentiary record.

The scope of Intervenor's challenges to Entergy's fatigue monitoring program ("FMP") in Contention NYS-26-B/RK-TC-1B is limited to the specific bases pled by the Intervenor and admitted by the Board. Those bases include alleged issues with the refined environmentally-assisted fatigue ("EAF") analyses performed by Westinghouse on behalf of Entergy in 2010, and alleged deficiencies in the FMP, including a lack of detail regarding the schedule and scope of any required repair and replacement activities. Contrary to this defined scope, however, portions of the Revised Position Statement newly argue that commitments made by license renewal applicants to the Nuclear Regulatory Commission ("NRC" or "Commission") are generally unenforceable and are not properly monitored by the NRC. Such arguments are not reasonably inferred from the bases of the admitted contention and are therefore outside the scope of NYS-26-B/RK-TC-1B and should be stricken. In addition, the Commission's recent decision in *Seabrook* confirms that Riverkeeper's repeated challenges to the current licensing basis ("CLB") fatigue analyses for the Indian Point Energy Center ("IPEC") reactor vessel inlet and outlet nozzles fall outside the scope of this contention, and by questioning the adequacy of these CLB analyses, Dr. Hopenfeld's Rebuttal Testimony confirms that these challenges are outside the scope of the proceeding.

II. LEGAL STANDARDS

10 C.F.R. § 2.337(a), the regulation governing the admissibility of evidence, provides that "[o]nly relevant, material, and reliable evidence . . . will be admitted. Immaterial or irrelevant parts of an admissible document will be segregated and excluded so far as is practicable." Thus, pursuant to 10 C.F.R. § 2.319(d), the Board may "strike any portion of a written presentation or a response to a written question that is irrelevant, immaterial, unreliable,

duplicative or cumulative,” and under Section 2.319(e) the Board may restrict evidence or arguments for the same reasons.

Because only relevant and material evidence is admissible, the Board may exclude or accord no weight to testimony and exhibits that are outside the admitted contention’s scope or that raise issues that were not properly raised in earlier pleadings.⁵ Thus, the Board may strike pre-filed testimony that introduces new bases for a contention.⁶ Similarly, it may exclude testimony and supporting evidence that is outside the scope of this license renewal proceeding.⁷

Recent Commission decisions confirm that intervenors are not permitted to change the scope of a contention as admitted by the Board. For example, in *Vogtle*, the Commission upheld a Board ruling excluding testimony that strayed beyond the scope of the bases as pled and admitted, because those bases “defined the scope of the . . . contention.”⁸

Similarly, in *Pilgrim*, the Commission reiterated that longstanding precedent requires a Board to reexamine the bases to determine the scope of a contention because the “reach of a

⁵ See, e.g., Licensing Board Order (Granting in Part and Denying in Part Applicant’s Motion *in Limine*) (Mar. 6, 2012) (unpublished) (granting in part and denying in part Entergy’s motions to exclude testimony and exhibits) (“Board March 6, 2012 Motion in Limine Rulings”); *S. Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), Licensing Board Memorandum and Order (Ruling on In Limine Motions) at 3-7 (Jan. 26, 2009) (unpublished) (granting in part motion to exclude testimony and exhibits outside the scope of the admitted contentions); *AmerGen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station), Licensing Board Memorandum and Order (Ruling on Motions in Limine and Motion for Clarification) at 1-2 (Aug. 9, 2007) (“Oyster Creek Ruling on Motions in Limine”) (unpublished) (granting in part motion to exclude evidence on topics outside scope of contention and license renewal proceeding).

⁶ *Nuclear Mgmt. Co., LLC* (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006) (“New bases for a contention cannot be introduced in a reply brief, or any other time after the date the original contentions are due, unless the petitioner meets the late-filing criteria set forth in 10 C.F.R. § 2.309(c), (f)(2).”); see also *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 309 (2010).

⁷ See, e.g., *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), Licensing Board Order (Ruling on Pending Matters and Addressing Preparation of Exhibits for Hearing) at 2 (Mar. 24, 2008) (unpublished) (granting in part motions to exclude testimony on topics outside the scope of a license renewal proceeding, because such issues “do not relate to aging and/or because they are addressed as part of ongoing regulatory process”); Oyster Creek Ruling on Motions in Limine at 6-7.

⁸ *S. Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71 NRC 90, 100-01 (2010).

contention necessarily hinges upon its terms *coupled with* its stated bases.”⁹ A key reason for this requirement is to provide notice to the opposing parties of the issues they will need to defend against.¹⁰ Because of this principle, Intervenor’s “may not freely change the focus of an admitted contention at will to add a host of new issues and objections that could have been raised at the outset. . . . [We] do not allow distinctly new complaints to be added at will as litigation progresses.”¹¹

Although this Board previously stated that licensing boards “admit contentions, not bases,”¹² since that decision the Commission has subsequently explained that “an admitted contention *is defined by its bases*.”¹³ The Commission accordingly reminded licensing boards “of the need to specify each basis relied upon for admitting a contention.”¹⁴

Intervenor’s have recently argued that the limitation of contentions to the specific bases pled and admitted would “plunge NRC proceedings into the abyss of common law pleading technicalities” that existed before the modernization of the Federal Rules of Civil Procedure (“FRCP”).¹⁵ This proceeding, however, is governed by the Rules of Practice in 10 C.F.R. Part 2, not the FRCP. Intervenor’s do not—and cannot—challenge the Commission’s decisions in *Palisades* (CLI-06-17), *Vogtle* (CLI-10-5), *Pilgrim* (CLI-10-11), and *Seabrook* (CLI-12-05),

⁹ *Pilgrim*, CLI-10-11, 71 NRC at 309 (emphasis added) (citing *Pub. Serv. Co. of N. H.* (Seabrook Station, Units 1 & 2), ALAB-899, 28 NRC 93, 97 (1988)).

¹⁰ *See id.*

¹¹ *Id.* (citation omitted) (internal quotation marks omitted); *see also* Board March 6, 2012 Motion in Limine Ruling at 3-4, 6-7, 10, 23, 28-29.

¹² Board March 6, 2012 Motion in Limine Rulings at 6-7.

¹³ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-05, 75 NRC ___, slip op. at 11 n.50 (Mar. 8, 2012) (emphasis added) (citation omitted).

¹⁴ *Id.*

¹⁵ State of New York and Riverkeeper’s Joint Answer to Entergy’s Motion in Limine to Exclude Portions of Intervenor’s Prefiled Direct Testimony, Expert Report, Statement of Position, and Exhibits for Contention NYS-38/RK-TC-5 at 8 (July 16, 2012) (“Joint Answer to Motion in Limine on NYS-38/RK-TC-5”) (not publicly available on ADAMS).

which, as explained above, compel the exclusion of testimony that strays beyond the specific bases of a contention, as *pled and admitted*.

III. ARGUMENT

As discussed below, the portions of the Intervenor's Revised Position Statement identified in Attachment 1, Table A should be stricken. In addition, the portions of Dr. Hopenfild's Rebuttal testimony identified in Attachment 1, Table B, and the Riverkeeper exhibits identified in Attachment 1, Table C should be excluded from the evidentiary record.

A. Scope of the Admitted Contention

On November 4, 2010, the Board dismissed Intervenor's earlier consolidated metal fatigue contentions as moot and admitted NYS-26B/RK-TC-1B.¹⁶ The new contention alleged that: "Entergy's License Renewal Application does not include an adequate plan to monitor and manage the effects of aging due to metal fatigue on key reactor components in violation of 10 C.F.R. § 54.21(c)(1)(iii)."¹⁷

Specifically, the Board identified the following bases for NYS-26B/RK-TC-1B, which focused on challenges to the 2010 EAF analysis conducted by Westinghouse:

NYS-26B/RK-TC-1B characterizes Entergy's reanalyses as inadequate under NRC regulations and the GALL Report because these *reanalyses* (1) inappropriately limited the number of components subject to fatigue analyses, (2) neither explain the methodology used to conduct their CUF [cumulative usage factor] analyses nor include a detailed error analysis, (3) exclude "a fatigue evaluation of important structures and fittings within the" reactor pressure vessel (RPV), (4) exclude from evaluation "the potential failure of highly fatigued structures and fittings under"

¹⁶ Licensing Board Memorandum and Order (Ruling on Motion for Summary Disposition of NYS-26/26A/Riverkeeper TC-1/1A (Metal Fatigue of Reactor Components) and Motion for Leave to File New Contention NYS-26B/Riverkeeper TC-1B)) at 2 (Nov. 4, 2010) (unpublished) ("Metal Fatigue Admissibility Ruling").

¹⁷ *Id.* at 7 (*citing* Petitioners State of New York and Riverkeeper, Inc. New and Amended Contention Concerning Metal Fatigue (Sept. 9, 2010) at 1 ("New and Amended Contention"), *available at* ADAMS Accession No. ML102670665).

certain types of “large thermal/pressure shock-type loads,” and (5) contain lower safety margins that create more risk because the *new* CUFs have been “reduced by more than an order of magnitude.” The Intervenor also note that “Entergy has not committed to repair or replace components when the CUF approaches unity (1.0).”¹⁸

Beyond the EAF reanalyses, the new contention challenged certain other specific aspects of the fatigue monitoring program, including the “monitoring locations, trigger points, and proposed actions . . . for metal fatigue,”¹⁹ and alleged inadequate corrective actions.²⁰ Notably, however, Intervenor’s did not raise issues with the original, design basis fatigue calculations for the reactor vessel inlet and outlet nozzles²¹ that were later updated to produce the CLB CUFs of record for those components,²² as reported in Entergy’s 2007 license renewal application (“LRA”) for the Indian Point Nuclear Generating Units 2 and 3 (“IP2” and “IP3”; collectively, Indian Point Energy Center, or “IPEC”).²³ Nor can such a challenge be reasonably inferred from the bases as pled and admitted, as the reactor vessel inlet and outlet nozzles were not analyzed in 2010 by Westinghouse and are not even mentioned in the pleadings. Likewise, Intervenor did not allege that applicant commitments made to the NRC as part of an LRA are generally unenforced or unenforceable—nor, again, is such a challenge reasonably inferred from the other

¹⁸ *Id.* at 8 (emphasis added) (*citing* New and Amended Contention at 9-11).

¹⁹ *Id.* at 14 (*citing* New and Amended Contention at 6-13).

²⁰ *See* New and Amended Contention at 6.

²¹ *See generally* State of New York’s and Riverkeeper’s Motion for Leave to File a New and Amended Contention Concerning the August 9, 2010 Entergy Reanalysis of Metal Fatigue (Sept. 9, 2010), *available at* ADAMS Accession No. ML102670665; New and Amended Contention; Declaration of Richard T. Lahey, Jr. (Sept. 8, 2010), *available at* ADAMS Accession No. ML102670665; Declaration of Dr. Joram Hopenfeld (Sept. 9, 2010), *available at* ADAMS Accession No. ML102670665. For example, the New and Amended Contention presents a table of data purportedly projecting the “[a]mount of exceedence of 1.0 CUF criterion” for certain components based on the LRA, without any entry on the reactor vessel inlet and outlet nozzles. New and Amended Contention at 15.

²² *See* Testimony of Entergy Witnesses Nelson F. Azevedo, Alan B. Cox, Jack R. Strosnider, Robert E. Nickell, and Mark A. Gray Regarding Contention NYS-26B/RK-TC-1B (Metal Fatigue) at A142 (Mar. 29, 2012) (“Entergy’s Metal Fatigue Testimony”) (ENT000183).

²³ *See* Indian Point Energy Center License Renewal Application [(“LRA”)] (Apr. 23, 2007) Tbls. 4.3-13 to 4.3-14, *available at* ADAMS Accession No. ML071210517.

bases listed above. Thus, because Intervenor failed to raise these issues when the contention was first pled or amended, neither of these issues is within the scope of NYS-26B/RK-TC-1B.²⁴

B. Any Challenge to the General Enforceability of Licensee Commitments Is Outside the Scope of the Admitted Contention

Pursuant to 10 C.F.R. §§ 2.319(d) and 2.337(a), the Board should exclude from its consideration those portions of the Intervenor's Revised Position Statement that challenge the general enforceability of commitments made by applicants during the license renewal application and review process. As explained in Section III.A, above, none of the bases of this contention—as pled by the Intervenor and admitted by the Board—raise this claim. Indeed, Intervenor's proposed contention, bases, and supporting filings, as well as the Board's Order admitting NYS-26B/RK-TC-1B are all silent on the issue of enforceability of commitments.²⁵ Now, for the first time in their Revised Position Statement, Intervenor asserts “substantial concerns over whether Entergy's [unspecified] commitments concerning metal fatigue . . . are enforceable in an NRC administrative enforcement proceeding or in a federal court action.”²⁶ The Board should accord no weight to those portions of the Intervenor's Revised Position Statement that belatedly challenge the enforceability of commitments,²⁷ as they are irrelevant to the contention as pled and admitted by the Board.²⁸

²⁴ See, e.g., *Seabrook*, CLI-12-05, slip op. at 11 n.50. Such claims are, however, the subject of a different admitted contention, NYS-38/RK-TC-5. See Licensing Board Memorandum and Order (Admitting New Contention NYS-38/RK-TC-5) at 10 (Nov. 10, 2011).

²⁵ See generally New and Amended Contention; Metal Fatigue Admissibility Ruling; Declaration of Dr. Richard T. Lahey, Jr. (Sept. 14, 2010), available at ADAMS Accession No. ML103010518; Declaration of Dr. Joram Hopenfeld in Opposition to Entergy's Motion for Summary Disposition of New York State Contentions 26/26A & Riverkeeper Technical Contentions 1/1A (Metal Fatigue of Reactor Components) (Sept. 13, 2010), available at ADAMS Accession No. ML103010518.

²⁶ Revised Position Statement at 30 (NYS000439).

²⁷ See *AmerGen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station), Licensing Board Memorandum and Order (Ruling on Motions in Limine and Motion for Clarification) at 2 (Aug. 9, 2007) (unpublished) (stating that portions of a position statement that raise excluded issues may be stricken). This Board has noted that a position statement is a party's legal interpretation of its evidence, not its actual

Intervenors may argue that Entergy opened the door to this issue by explaining, in the “Legal Standards” section of its Statement of Position, that licensee commitments are a well-established practice in the license renewal area, and that the NRC Staff’s review of commitment implementation activities is outside the scope of a license renewal proceeding under 10 C.F.R. Part 54.²⁹ The fact that Entergy relied upon a heretofore unchallenged—in NYS-26B/RK-TC-1B—aspect of the NRC’s regulatory process does not expand the bases of the admitted contention, nor does it waive Entergy’s objections to such challenges as outside the scope of the contention and proceeding.³⁰

Moreover, Entergy is prejudiced by the introduction of this new material at a point in the proceeding where there is no established opportunity for a written evidentiary response in the context of this contention. These new arguments were not raised in Intervenors’ direct testimony or associated filings, but were instead introduced for the first time in rebuttal.

In the alternative, should the Board determine that the specified material in Intervenors’ Revised Position Statement should not be stricken, because the enforceability of commitments is questioned in NYS-38/RK-TC-5, Entergy respectfully requests that the portions of its testimony,

evidence, and that the Board will use it inasmuch as it is supported by the evidence proffered by that party. *See* Board March 6, 2012 Motion in Limine Rulings at 24.

²⁸ The Board should also exclude from the record of Contention NYS-26B/RK-TC-1B, those exhibits which are, in the context of this contention, cited only in those portions of the Revised Statement of Position that raise the enforceability-of-commitments issue. Those exhibits are listed in Attachment 1, Table A.

²⁹ Revised Position Statement at 30 (NYS000439) (*citing* Entergy’s Statement of Position Regarding Contention NYS-26B/RK-TC-1B (Metal Fatigue) at 22-24 (Mar. 29, 2012) (ENT000182) (“Entergy’s Position Statement”)).

³⁰ *See Progress Energy Fla., Inc.* (Levy County Nuclear Power Plant, Units 1 & 2), LBP-09-22, 70 NRC 640, 655 (2009) (“Being in the nature of rebuttal, the response, rebuttal testimony, and rebuttal exhibits are *not to advance any new affirmative claims* or arguments that should have been, but were not, included in the party’s previously filed initial written statement.”) (emphasis added).

exhibits, and statement of position in NYS-38/RK-TC-5 that address this issue be considered as part of the record of NYS-26B/RK-TC-1B.³¹

C. Challenges to Design Basis Fatigue Calculations Are Outside the Scope of the Admitted Contention and This Proceeding

The Board also should exclude the portions of Dr. Hopenfeld's Testimony that challenge the adequacy of the original design basis CUF calculations for the reactor vessel inlet and outlet nozzles for IPEC. These critiques are outside the scope of both the admitted contention and this license renewal proceeding and, therefore, should be excluded as irrelevant under 10 C.F.R. §§ 2.319(d) and 2.337(a).

On January 30, 2012, Entergy filed a motion in limine regarding Intervenors' direct testimony, seeking, among other things, to exclude Dr. Hopenfeld's technical critique of Entergy's 40-year-old design basis fatigue calculations for the IP2 and IP3 reactor vessel inlet and outlet nozzles because they were outside the scope of this contention and proceeding.³² The NRC Staff supported Entergy's Metal Fatigue Motion in Limine,³³ but Riverkeeper opposed it, arguing that Dr. Hopenfeld's direct testimony did not challenge the IPEC design basis or CLB and was "indisputably" within the scope of the contention.³⁴ The Board denied Entergy's motion

³¹ Those materials are scheduled to be filed on or before August 20, 2012. Entergy's alternative relief request, therefore, would not introduce any additional filings in this proceeding, nor would it delay the schedule for hearings on any contention.

³² See Entergy's Motion in Limine to Exclude Portions of Pre-Filed Direct Testimony, Expert Report, Exhibits, and Statement of Position for Contention NYS-26B/RK-TC-1B (Metal Fatigue) (Jan. 30, 2012) ("Entergy's Metal Fatigue Motion in Limine") (not publicly available on ADAMS).

³³ See NRC Staff's Response in Support of Entergy's Motion *in Limine* to Exclude Portions of Pre-filed Direct Testimony, Expert Report, Exhibits, and Statement of Position for Contention NYS-26B/RK-TC-1B (Metal Fatigue) at 8 (Feb. 9, 2012) (not publicly available on ADAMS).

³⁴ Riverkeeper, Inc. Opposition to Entergy's Motion in Limine to Exclude Portions of Pre-filed Testimony, Expert Report, Exhibits, and Statement of Position for Contention NYS-26B/RK-TC-1B (Metal Fatigue) at 10-11 (Feb. 17, 2012) ("Riverkeeper Opposition to Metal Fatigue Motion in Limine") (not publicly available on ADAMS).

on March 6, 2012, finding that Riverkeeper did not challenge any of the design basis CUF calculations.³⁵

1. The Adequacy of Design Basis Fatigue Calculations Are Outside the Scope of this Proceeding

In its response to Entergy's Metal Fatigue Motion in Limine, Riverkeeper provided a new declaration from Dr. Hopenfeld, which stated that his testimony "does not challenge the original design basis CUF calculations."³⁶ Riverkeeper further explained that Entergy provided documentation for the design basis fatigue calculations to Riverkeeper in response to inquiries about the heat transfer coefficients that were "*applied to the 2010 'refined' EAF reanalysis,*"³⁷ thereby suggesting to the Board that the information in those design basis calculations somehow fed into the Westinghouse EAF analyses performed in 2010. The Board appears to have agreed with Riverkeeper's assertions, stating that the testimony in question was appropriate: "Riverkeeper's testimony on *reanalysis of selected components, performed by Westinghouse* as part of Entergy's [CLB], relates to the evaluation of similar refined fatigue calculations and are an aspect of the Applicant's AMP for metal fatigue."³⁸

Entergy's Metal Fatigue Testimony, however, demonstrates that Riverkeeper and Dr. Hopenfeld's statements to the Board were incorrect.³⁹ As Entergy's witnesses explain, the 40-year-old reactor vessel inlet and outlet fatigue calculations challenged by Riverkeeper and Dr.

³⁵ See Board March 6, 2012 Motion in Limine Rulings at 15-16.

³⁶ Declaration of Joram Hopenfeld in Support of Riverkeeper's Opposition to Entergy's Motion in Limine to Exclude Portions of Pre-filed Testimony, Expert Report, Exhibits, and Statement of Position for Contention NYS-26B/RK-TC-1B (Metal Fatigue) ¶ 19 (Feb. 17, 2012) ("Feb. 17 Hopenfeld Declaration") (not publicly available on ADAMS).

³⁷ Riverkeeper Opposition to Metal Fatigue Motion in Limine at 10 (*citing* Feb. 17 Hopenfeld Decl. ¶ 19); *see also id.* at 10-11.

³⁸ Board March 6, 2012 Motion in Limine Rulings at 15-16 (emphasis added). As demonstrated above, however, the testimony in question does not relate to any reanalysis of fatigue, nor was it performed by Westinghouse.

³⁹ See Entergy's Position Statement at 42-44 (ENT000182) (*citing* Entergy's Metal Fatigue Test. at A142 (ENT000183)).

Hopenfeld: (1) are part of the original design basis for IP2 and IP3; (2) are part of the CLB for IP2 and IP3; (3) cover components that were not the subject of any refined fatigue analysis during the course of this license renewal proceeding and do not relate to the evaluation of similar refined fatigue calculations that might be conducted in the future as part of the FMP; and (4) were in fact critiqued by Dr. Hopenfeld.⁴⁰ In rebuttal, Dr. Hopenfeld does not dispute these facts.⁴¹

Instead, Dr. Hopenfeld's Rebuttal Testimony contradicts Riverkeeper's current and prior positions and confirms that the testimony on this topic is outside the scope of this proceeding because it challenges the adequacy of the IPEC CLB.⁴² For example, Dr. Hopenfeld repeatedly refers to the calculations in question as "CLB CUFs."⁴³ His admission that he "questioned the validity of the CLB CUFs" is directly contrary to Riverkeeper's prior characterizations.⁴⁴ In doing so, Dr. Hopenfeld effectively concedes that the design basis CUF calculations for the reactor vessel inlet and outlet nozzles are part of the CLB for IP2 and IP3. He also acknowledges that the reactor vessel outlet nozzles "were excluded from the refined analysis,"⁴⁵ again contrary to Riverkeeper's prior statements.⁴⁶

⁴⁰ See Entergy's Position Statement at 42 (ENT000182) (*citing* Entergy's Metal Fatigue Testimony at A142 (ENT000183)).

⁴¹ See Rebuttal Testimony at 23-27 (RIV000114). The only exception may be the seemingly self-contradicting statement that "my testimony does not attack the original design basis of the plant, but simply noted that Entergy did not include the cladding in the [design basis] analysis, and concluded that such parameters must be included in the fatigue analysis."). *Id.* at 24:8-10.

⁴² See *Fla. Power & Light Co.* (Turkey Point Nuclear Plan, Units 3 and 4), CLI-01-17, 54 NRC 3, 8-9 (2001) (stating that components that are part of the CLB are outside the scope of license renewal proceedings, as they are "effectively addressed and maintained by ongoing agency oversight," which "can reasonably be expected to [ensure compliance] during the renewal term.").

⁴³ Rebuttal Testimony at 23:17, 18, 22, 29; 26:9, 10, 13 (RIV000114).

⁴⁴ See, e.g., Riverkeeper Opposition to Metal Fatigue Motion in Limine at 10-11 ("Dr. Hopenfeld's testimony in no way challenges design basis CUFs or Indian Point's current licensing basis [CLB]").

⁴⁵ Rebuttal Testimony at 27:12-13 (RIV000114).

⁴⁶ See Riverkeeper Opposition to Metal Fatigue Motion in Limine at 10 (suggesting that the fatigue calculations for these components "*applied to the 2010 'refined' EAF reanalysis.*").

Dr. Hopenfeld states that critiques of the IPEC design basis reactor vessel inlet and outlet nozzle CUFs are appropriate because the environmental correction factor (“F_{en}”) was applied to them and Entergy relies on the resulting CUF_{en}s in its LRA.⁴⁷ Dr. Hopenfeld does not dispute, however, that the original design basis fatigue calculations for the reactor vessel inlet and outlet nozzles are part of the CLB.⁴⁸ The application of environmental correction factors to calculations that are part of the CLB does not bring the CLB into the scope this proceeding.⁴⁹ As the Commission has held, an applicant’s reliance on information from the CLB in its LRA does not open up that adequacy of the CLB to challenges in a license renewal hearing.⁵⁰

Contrary to the Commission’s ruling, Dr. Hopenfeld’s Rebuttal Testimony directly challenges the design basis CUF calculations for these components. He asserts that he “questioned the validity of the CLB CUFs” because they were: (a) based on simplified heat transfer analyses and did not account for the stretch power uprates at IP2 and IP3 in 2004 and 2005, respectively; and (b) omitted the effects of the nozzle cladding (or, as Dr. Hopenfeld inexplicably puts it, “the analyses were conducted with the cladding removed from the

⁴⁷ Rebuttal Testimony at 23:17-18 (RIV000114) (“[S]ince the CLB CUFs were used in the calculations of the CUF_{en}, it was perfectly legitimate to question the validity of, and examine the technical basis for, the CLB CUF.”).

⁴⁸ See *id.* at 23:22 (“I questioned the validity of the CLB CUFs”).

⁴⁹ See *Turkey Point*, CLI-01-17, 54 NRC at 9 (“In establishing its license renewal process, the Commission did not believe it necessary or appropriate to throw open the full gamut of provisions in a plant’s [CLB] to re-analysis during the license renewal review.”); *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 & 3), LBP-08-13, 68 NRC 43, 73 (2008).

⁵⁰ See *Oyster Creek Ruling on Motions in Limine* at 5-6 (striking challenges to the adequacy of ASME Code-based minimum thickness acceptance criteria as an impermissible challenge to the CLB); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-07-17, 66 NRC 327, 342 & n.19 (2007) (holding same acceptance criteria to be part of CLB), *aff’d* CLI-09-7, 69 NRC 235, 270-71 (2009). Riverkeeper has argued that evidence is not subject to exclusion in a license renewal proceeding merely because it “touches upon” the CLB. See *Riverkeeper Opposition to Metal Fatigue Motion in Limine* at 11 (*citing Entergy Nuclear Vt. Yankee* (Vt. Yankee Nuclear Power Station), Licensing Board Order (Ruling on Motions to Strike and Motions in Limine) at 10 (July 16, 2008) (unpublished)). Dr. Hopenfeld’s testimony, however, does much more than “touch upon” the CLB, it directly challenges it. See Rebuttal Testimony at 23:22-27 (RIV000114).

nozzle”).⁵¹ But, as Entergy’s experts have explained, the heat transfer coefficient Entergy used and the effects of cladding in the ASME Code stress and fatigue analysis do *not* relate to the application of the F_{en} .⁵² Instead, these claims directly challenge the adequacy of the original, 40-year-old design basis fatigue analyses.⁵³ Accordingly, because Intervenors’ allegations are a direct challenge to the CLB at IPEC, these claims are outside the scope of this proceeding and should be excluded as irrelevant.

2. The Adequacy of Design Basis Fatigue Calculations Are Outside the Scope of this Contention

Entergy’s earlier motion in limine also argued that Dr. Hopenfeld’s challenges to the design basis fatigue calculations for the reactor vessel inlet and outlet nozzles were outside the scope of NYS-26B/RK-TC-1B because the fatigue calculations for these components were not questioned in the bases for the contention, as pled or admitted.⁵⁴ In response, Riverkeeper claimed that NYS-26B/RK-TC-1B is “a broad criticism pertaining to Entergy’s failure to demonstrate an adequate program to manage metal fatigue during the proposed period of extended operation.”⁵⁵ Riverkeeper asserted, based on a new Declaration from Dr. Hopenfeld, that challenges to the design basis fatigue calculations for the reactor vessel inlet and outlet nozzles were “*indisputably* within the scope of the Consolidated Contention” because Dr.

⁵¹ Rebuttal Testimony at 23:22-27 (RIV000114).

⁵² See Entergy’s Metal Fatigue Testimony at A142-145 (ENT000183). Entergy’s witnesses also explain that the design basis fatigue calculations were updated and approved by the NRC at the time of the IPEC uprates. The updated analyses are likewise part of the CLB. See *id.* at A142. Dr. Hopenfeld’s Rebuttal Testimony does not dispute or address these facts.

⁵³ See *id.* at A142-145

⁵⁴ See Entergy’s Metal Fatigue Motion in Limine at 10-11.

⁵⁵ Riverkeeper Opposition to Metal Fatigue Motion in Limine at 4.

Hopenfeld’s testimony alleged “deficiencies with Entergy’s refined fatigue analyses.”⁵⁶ Based apparently on these assertions, the Board denied Entergy’s motion.⁵⁷

Riverkeeper’s position that NYS-26B/RK-TC-1B is a broad, open-ended challenge to Entergy’s FMP is no longer tenable. Instead, as the Commission confirmed in *Seabrook*, a decision issued after the Board’s March 6, 2012 Motion in Limine Rulings, no contention can be construed to include bases that were not pled and admitted.⁵⁸ For NYS-26B/RK-TC-1B, a review of the five bases identified in the Metal Fatigue Admissibility Ruling—and, indeed, a review of all of the filings made at the time of the New and Amended Contention—reveals no challenge to the design basis fatigue calculations for the reactor vessel inlet and outlet nozzles.⁵⁹ In addition, the record is now clear that these components were not the subject of a refined fatigue analysis and do not relate to the evaluation of similar refined fatigue calculations that might be conducted in the future as part of the FMP.⁶⁰ Thus, Riverkeeper’s challenges to the fatigue analyses for these components are outside the scope of this contention and should be excluded as irrelevant.

D. Exhibits RIV000103 through RIV000106 Should be Excluded as Irrelevant

Riverkeeper Exhibits RIV000103,⁶¹ RIV000104,⁶² RIV000105,⁶³ and RIV000106,⁶⁴ submitted for the first time in support of NYS-38/RK-TC-5 on June 19, 2012, have also been

⁵⁶ *Id.* at 11 (emphasis added).

⁵⁷ *See* Board March 6, 2012 Motion in Limine Rulings at 15-16.

⁵⁸ *See Seabrook*, CLI-12-05, slip op. at 11 n.50 (“an admitted contention is defined by its bases”).

⁵⁹ There are no criticisms of the adequacy of the fatigue calculations for these components in the New and Amended Contention or its superseded prior versions.

⁶⁰ *See* Entergy’s Metal Fatigue Testimony at A142 (ENT000183); Rebuttal Testimony at 27:12-13 (RIV000114) (acknowledging these facts).

⁶¹ J. Hopenfeld et al., *Small Sodium to Gas Leak Behavior in Relation to LMFBR Leak Detection System Design*, Int’l Conference on Liquid Metal Tech. (May 1976).

designated as relevant to NYS-26B/RK-TC1B and are referenced in Dr. Hopenfeld's Rebuttal Testimony on pages 6 to 7. As explained in Entergy's Motion in Limine on NYS-38/RK-TC-5, however, these documents have no apparent nexus to the issues admitted for hearing, and instead speak to Dr. Hopenfeld's purported expertise on unrelated issues.⁶⁵ Therefore, these documents should be excluded from the record as irrelevant under 10 C.F.R. §§ 2.319(d) and 2.337(a).⁶⁶

⁶² Memorandum from S. Collins (RES) to W. Travers (EDO), "Steam Generator Action Plan Revision to Address Differing Professional Opinion on Steam Generator Tube Integrity (WITS ITEM 200100026)" (May 11, 2001).

⁶³ NUREG-1740, Voltage-Based Alternative Repair Criteria, A Report to the Advisory Committee on Reactor Safeguards by the Ad Hoc Subcommittee on a Differing Professional Opinion (Mar. 2001).

⁶⁴ Associated Press, *Nuke inspectors focus on 'unusual' wear on tubes*, Fox News.com (Feb. 3, 2012).

⁶⁵ In addition, Riverkeeper disclosed three of these four documents for the first time on July 2, 2012, *after* the filing of the documents as exhibits in both contention NYS-26B/RK-TC-1B and NYS-38/RK-TC-5. *See* Riverkeeper, Inc. Mandatory Disclosure Update Pursuant to 10 C.F.R. § 2.336 (July 2, 2012), Attachment 2 to this Motion.

⁶⁶ Intervenor's response to the Motion in Limine on NYS-38/RK-TC-5 argues that these documents speak to Dr. Hopenfeld's credibility and expertise, and are therefore relevant. *See* Joint Answer to Motion in Limine on NYS-38/RK-TC-5 at 13-15. The Board, however, has ruled that Dr. Hopenfeld has sufficient training and experience to assist the Board. *See* Board March 6, 2012 Motion in Limine Rulings at 14. Thus, there is no current dispute over Dr. Hopenfeld's qualifications. Moreover, Riverkeeper's unprecedented theory, if adopted, would open the record to voluminous exhibits on topics that are not directly related to the issues in dispute. It should therefore be rejected.

IV. CONCLUSION

For the foregoing reasons, the Board should strike the portions of the Intervenor's Revised Position Statement and supporting exhibits identified in Attachment 1. It should also exclude from the record the identified portions of Dr. Hopenfeld's Rebuttal Testimony, as well as Exhibits RIV000103, RIV000104, RIV000105, and RIV000106.

Respectfully submitted,

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Counsel for Entergy Nuclear Operations, Inc.

Dated in Washington, D.C.
this 30th day of July 2012

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	Docket Nos. 50-247-LR and
	)	50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.)	
)	
(Indian Point Nuclear Generating Units 2 and 3))	
	)	July 30, 2012

MOTION CERTIFICATION

Pursuant to 10 C.F.R. § 2.323(b), counsel for Entergy certifies that he made a sincere effort to contact the other parties in this proceeding, to explain to them the factual and legal issues raised in this Motion, and to resolve those issues, and he certifies that his efforts have been unsuccessful.

Signed (electronically) by Raphael P. Kuyler

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ATTACHMENT 1

Exclusion Chart

Entergy Attachment 1 to Entergy’s Motion to Strike Portions of the Statement of Position and Motion in Limine to Exclude Portions Pre-Filed Rebuttal Testimony and Exhibits for Contention NYS-26B/RK TC-1B (Metal Fatigue)

Table A – Statements Addressing the Enforceability of Commitments

Location of Information to Be Stricken	Basis for Exclusion
State of New York & Riverkeeper, Inc’s Position Statement (Exh. NYS000439)	
Point II, pages 30-36, strike all.	Challenges to the enforceability of commitments are outside the scope of the contention.
Exhibits to be excluded	
NYS000181 , NRC Office of the Inspector General, Audit of NRC’s Management of Licensee Commitments, OIG-A-17 (Sept. 19, 2011)	Exhibits support Intervenor’s challenges to the enforceability of commitments, which are outside the scope of the contention, and should be excluded from contention NYS-26B/RK-TC-1B. ⁶⁷
NYS000396 , Letter from C. Miller, Division of Reactor Safety, to Sarah Hofmann, Vermont Department of Public Service (Mar. 20, 2012) (Response to Question in State of Vermont Letter of December 23, 2011)	

Table B – Statements Addressing Design Basis Calculations for Reactor Vessel Inlet and Outlet Nozzles

Location of Information to Be Stricken	Basis for Exclusion
Dr. Hopenfeld’s Rebuttal Testimony (Exh. RIV000114)	
Page 23, Line 4 through Page 27, Line 16, strike all.	Challenges to the adequacy of the design basis CUF calculations for these components are outside the scope of the contention and proceeding.

Table C – Riverkeeper Exhibits to be Excluded

Location of Information to Be Stricken	Basis for Exclusion
RIV000103 , J. Hopenfeld, et al., Small Sodium to Gas Leak Behavior in Relation to LMFBR Leak Detection System Design, International Conference on Liquid Metal Technology (May 1976)	Exhibits are not relevant to the issues raised in NYS-26B/RK-TC-1B and admitted by the Board for hearing.
RIV000104 , Memorandum from S. Collins (RES) to W. Travers (EDO), “Steam Generator Action	

⁶⁷ Entergy notes that the most recent exhibit list for NYS (NYSR13001) does not reflect that these exhibits are relevant to NYS-26B/RK-TC-1B.

Location of Information to Be Stricken	Basis for Exclusion
Plan Revision to Address Differing Professional Opinion on Steam Generator Tube Integrity (WITS ITEM 200100026)” (May 11, 2001)	
RIV000105 , NUREG-1740, “Voltage-Based Alternative Repair Criteria, A Report to the Advisory Committee on Reactor Safeguards by the Ad Hoc Subcommittee on a Differing Professional Opinion” (March/Feb. 2001), page 5	
RIV000106 , Associated Press, “Nuke inspectors focus on ‘unusual’ wear on tubes,” Fox News.com, February 3, 2012	

ATTACHMENT 2

Riverkeeper, Inc. Mandatory Disclosure Update Pursuant
to 10 C.F.R. § 2.336 (July 2, 2012)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

)	
In the Matter of	)	Docket Nos.
	)	50-247-LR
Entergy Nuclear Operations, Inc.	)	and 50-286-LR
(Indian Point Nuclear Generating)	
Units 2 and 3)	)	July 2, 2012
)	

**RIVERKEEPER, INC. MANDATORY
DISCLOSURE UPDATE PURSUANT TO 10 C.F.R. § 2.336**

Pursuant to 10 C.F.R. § 2.336, as modified by the Agreement of the Parties Regarding Mandatory Discovery Disclosures dated January 13, 2009 (“Mandatory Disclosure Agreement”), Riverkeeper, Inc. (“Riverkeeper”) hereby makes the following mandatory disclosure update to all parties.

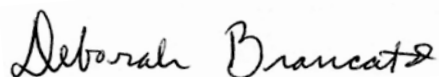
I. Documents

In accordance with 10 C.F.R. § 2.336(a)(2), Riverkeeper identifies the following supplemental documents, data compilations, and tangible things, e.g., books, publications, and treatises, (collectively referred to as “documents”) in the possession, custody, or control of Riverkeeper that are relevant to our three admitted contentions, in the list below. Riverkeeper incorporates by reference, however, pursuant to the Mandatory Disclosure Agreement, does not list documents already served on the parties in this proceeding, relevant news clippings, and drafts of documents. The following list also excludes documents for which Riverkeeper claims a privileged status, although, in accordance with the Mandatory Disclosure Agreement, Riverkeeper will not produce a privilege log for documents asserted to be protected from disclosure under attorney work- product and/or attorney-client privileges.

Category	Description	Document Date	Location	Contention
Report	Enercon, Conversion of Indian Point Units 2 & 3 to a Closed-Loop Cooling Water Configuration, Attachment 3, GZA GeoEnvironmental, Inc., Subsurface Radiological Considerations Related to Construction of Closed-Loop Cooling at Indian Point Energy Center Units 2 and 3	01/18/2009	Riverkeeper, Inc., 20 Secor, Rd., Ossining NY 10562	RK-EC-3/CW-EC-1
Comments	Riverkeeper Comments For Senior Management Review of NRC Groundwater Task Force Report, Docket ID NRC-2010-0302	11/01/2010	ADAMS Accession No. ML103120555	RK-EC-3/CW-EC-1
Report	Hopenfeld, Taylor, & James, Small Sodium-to-Gas Leak Behavior in Relation to LMFBR Leak Detection System Design	1976	Riverkeeper, Inc., 20 Secor, Rd., Ossining NY 10562	NYS-26B/RK-TC-1B; RK-TC-5
Report	Steam Generator Action Plan Revision to Address the Differing Professional Opinion of Steam Generator Tube Integrity	05/11/2001	http://pbadupws.nrc.gov/docs/ML0113/ML011300073.pdf	NYS-26B/RK-TC-1B; RK-TC-5
Report	NUREG-1740, Voltage-Based Alternative Repair Criteria, A Report to the Advisory Committee on Reactor Safeguards by the Ad Hoc Subcommittee on a Differing Professional Opinion	March 2001	http://pbadupws.nrc.gov/docs/ML0107/ML010750315.pdf	NYS-26B/RK-TC-1B; RK-TC-5
Report	NRC: Bulletin 88-11: Pressurizer Surge Line Thermal Stratification	12/201988	http://www.nrc.gov/reading-rm/doc-collections/gen-comm/bulletins/1988/bl88011.html	NYS-26B/RK-TC-1B; RK-TC-5
Report	Audit of NRC's License Renewal Program, OIG-07-A-15	09/06/2007	http://pbadupws.nrc.gov/docs/ML0724/ML072490486.pdf	GA
Report	Higuchi, Nakamura, & Sugie, Development of an Environmental Fatigue Evaluation Method for Nuclear Power Plants in JSME Code	2010	Riverkeeper, Inc., 20 Secor, Rd., Ossining NY 10562	NYS-26B/RK-TC-1B; RK-TC-5

Report	Case Study of the Propagation of a Small Flaw Under PWR Loading Conditions and Comparison with the ASME Code Design Life Comparison of ASME Code Sections III and XI, CONF-860722-12 TI86 005150		http://www.osti.gov/bridge/servlets/purl/5615261-GtIYCc/5615261.pdf	NYS-26B/RK-TC-1B; RK-TC-5
Report	Applicability of the leak before break concept, IAEA-TECDOC-710	June 1993	http://www-pub.iaea.org/MTC/D/publications/PDF/te_710_web.pdf	NYS-26B/RK-TC-1B; RK-TC-5
Transcript	Official Transcript of Proceedings, Nuclear Regulatory Commission, Entergy Nuclear Vermont Yankee, 50-271-LR; ASLBP No. 06-849-03-LR, Newfane, Vermont, pages 1451-1741	07/24/2008	NRC EHD	RK-TC-2
Testimony	In the Matter of Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), Docket No. 50-271 –LR, ASLBP No. 06-849-03-LR, Testimony of Jeffrey S. Horowitz and James C. Fitzpatrick on NEC Contention 4 – Flow-Accelerated Corrosion	05/12/2008	NRC EHD	RK-TC-2

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**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	Docket Nos. 50-247-LR and
	)	50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.)	
)	
(Indian Point Nuclear Generating Units 2 and 3))	
	)	July 30, 2012

CERTIFICATE OF SERVICE

I hereby certify that on July 30, 2012, a copy of the “Entergy’s Motion to Strike Portions of the Statement of Position and Motion in Limine to Exclude Portions of the Pre-Filed Rebuttal Testimony and Exhibits for Contention NYS-26B/RK-TC-1B (Metal Fatigue)” was served electronically via the Electronic Information Exchange on the following recipients.

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