

**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ATOMIC SAFETY AND LICENSING BOARD**

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In re: Docket Nos. 50-247-LR; 50-286-LR  
  
License Renewal Application Submitted by ASLBP No. 07-858-03-LR-BD01  
  
Entergy Nuclear Indian Point 2, LLC, DPR-26, DPR-64  
Entergy Nuclear Indian Point 3, LLC, and  
Entergy Nuclear Operations, Inc. July 16, 2012  
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**STATE OF NEW YORK AND RIVERKEEPER'S  
JOINT ANSWER TO ENTERGY'S MOTION IN LIMINE  
TO EXCLUDE PORTIONS OF INTERVENORS'  
PREFILED DIRECT TESTIMONY, EXPERT REPORT,  
STATEMENT OF POSITION, AND EXHIBITS FOR  
CONTENTION NYS-38/RK-TC-5**

Office of the Attorney General  
for the State of New York  
The Capitol  
State Street  
Albany, New York 12224

Riverkeeper, Inc.  
20 Secor Road  
Ossining, New York 10562

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## **INTRODUCTION**

Entergy seeks to restrict testimony related to Contention NYS-38/RK-TC-5 (“NYS 38”) by excising any reference to “tube-to-tubesheet welds” because, Entergy asserts, these locations were never referenced in the original contention or its bases. The Board should reject Entergy’s argument because (1) it is factually in error and (2) it is based on a distortion of the prevailing Commission law regarding the permissible scope of contentions and testimony.

Entergy also seeks to exclude exhibits presented by Riverkeeper and its expert Dr. Hopenfeld. The Board should reject that request as well because those documents concern age-related degradation issues, (including fatigue crack formation, growth, and detection), associated with nuclear steam supply system (NSSS) components, such as steam generators. The matters discussed in these documents are directly relevant to fatigue analysis and fatigue management, and reflect Dr. Hopenfeld’s extensive experience with such issues, and thereby counter Entergy’s criticisms of Dr. Hopenfeld’s expertise with metal fatigue.

NRC Staff did not submit a motion in limine on these issues.

## **PROCEDURAL FACTS**

New York and Riverkeeper timely filed NYS-38/RK-TC-5 on September 30, 2011. State of New York and Riverkeeper’s New Joint Contention NYS-38/RK-TC-5, September 30, 2011 (“Contention Filing”) (in ADAMS package ML11273A190). The contention was based on the Supplemental Safety Evaluation Report issued by NRC Staff on August 30, 2011. Supplement to Safety Evaluation Report Related to the License Renewal of Indian Point Nuclear Generating Unit Nos. 2 and 3 (“SSER”) ML11243A109 . The core issue in NYS-38 was Entergy’s failure to provide sufficient details about how it would address a number of newly disclosed aging management problems to allow the Board to determine whether Entergy had “demonstrated”

compliance with 10 C.F.R. §§ 54.21(a)(3), (c)(1)(iii) and 54.29 in this proceeding before the Indian Point facilities received extended operating licenses and entered the 20-year period of extended operation – and NRC’s acceptance of that proposed approach. The intervenors’ submission provided examples of this deficient practice. Contention Filing at 1-2 (“The AMPs for which Entergy is proposing to taking future action, after completion of these hearings, include at least the following...”)

With regard to steam generator components and cracking, NYS-38 referred to “primary water stress corrosion cracking (“PWSCC”) for the nickel alloy or nickel-alloy clad steam generator (“SG”) divider plates exposed to reactor coolant, a problem which could impact components directly relevant to plant safety. SSER at 3-18 to 3-19.” Contention Filing at 2. Entergy and Staff opposed admission of NYS-38. Applicant’s Opposition to New York State’s and Riverkeeper’s Joint Motion to Admit New Contention NYS-38/RK-TC-5, (Oct. 25, 2011) (“Entergy Opposition To Contention”) (ML11298A380); NRC Staff’s Answer to State of New York and Riverkeeper’s Joint Motion To File a New Contention and New Joint Contention NYS-38/RK-TC-5, (Oct. 25, 2011) (ML11298A379). The Board granted admission of NYS-38 holding that

“[t]he Intervenors have broadly contended, relying on multiple bases, that Entergy’s new commitments do not meet NRC regulations for having a program that will adequately manage the effects of aging during the period of extended operations” and that “Intervenors, relying on their experts, claim that there is insufficient information in Entergy’s recent commitments . . . to determine whether it has an adequate AMP. Whether the Intervenors and their experts are correct is an issue to be determined on the merits at an evidentiary hearing.”

*Entergy Nuclear Operations, Inc.* (Indian Point Generating Units 2 and 3), Memorandum and Order (Admitting New Contention NYS-38/RK-TC-5) November 10, 2011 (“ASLB Initial Admission Order”) at pp. 10, 11-12. NYS-38 did not mention any Entergy Commitment by

number, but focused instead on the Entergy-proposed, and Staff-approved, approach to address the PWSCC problem for steam generator components with a future inspection plan or a future industry standard, the details of which were not to be revealed prior to NRC regulatory action on the requested extended operating license.

Subsequently, Entergy sought clarification of the Board's ruling admitting NYS-38. Applicant's Motion For Clarification Of Licensing Board Memorandum And Order Admitting Contention NYS-38/RK-TC-5, November 21, 2011 ("Entergy Clarification Motion"), (ML11325A433). Although the Board clarified its earlier ruling, it rejected Entergy's substantive position. *Entergy Nuclear Operations, Inc.* (Indian Point Generating Units 2 and 3), Order (Granting Entergy's Motion for Clarification of Licensing Board Memorandum and Order Admitting Contention NYS-38/RK-TC-5) December 6, 2011 ("Clarification Order"). One focus of Entergy's Clarification Motion (at 2-3) was the portion of NYS-38 that challenged the adequacy of Entergy's proposal to address PWSCC "for the nickel alloy or nickel-alloy clad steam generator ('SG') divider plates exposed to reactor coolant, a problem which could impact components directly relevant to plant safety" (Contention Filing at 2). With regard to this portion of NYS-38 Entergy asked that the Board confine the scope of the contention to Entergy's Commitment 41. The Board clarified its earlier ruling, but ruled against Entergy on the merits. The Board held that:

"[t]he language of our November 10, 2011 Memorandum and Order did not limit NYS-38/RK-TC-5 solely to Commitment 41. Rather, in finding NYS-38/RK-TC-5 admissible, we admitted the Intervenors' 'broad' contention, which relied on 'multiple bases' including the 'claim that there is insufficient information in Entergy's recent commitments' that were addressed in the SSER."

Clarification Order at 3.

Entergy's present Motion in Limine with regard to NYS-38 is essentially a reargument of

the same position it unsuccessfully urged in its Motion for Clarification, focusing again on an attempt to limit the testimony regarding NYS-38 and steam generator component cracking to Entergy's Commitment 41. For the same reasons already articulated by the Board in its Clarification Order, the Motion in Limine should be denied.

## **ARGUMENT**

### **I. THE BOARD SHOULD REJECT ENTERGY'S RENEWED ATTEMPT TO LIMIT THE SCOPE OF CONTENTION NYS-38**

Entergy's request to limit the intervenors' testimony, evidence, and arguments is wrong on the facts and on the law.

#### **A. Entergy Is Factually Wrong**

Entergy's Motion in Limine is factually in error because the scope of NYS-38 is not limited to a challenge to Entergy's Commitment 41<sup>1</sup> and encompasses all the proposed plans to address cracking in the steam generator that may cause cracks in safety related components where Entergy is not now providing the details of its proposed approaches. The bases for NYS-38 specifically reference the August 2011's SSER at pp. 3-18 to 3-19. Contention Filing at 2.<sup>2</sup> That reference is provided in the context of the assertion that Entergy has failed to provide the

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<sup>1</sup> In its Motion in Limine Entergy focuses on the steam generator portion of NYS-38 as though it were only a challenge to a specific commitment. Entergy repeatedly frames NYS-38 and supporting reports and testimony as though they now, for the first time, seek to challenge Commitment 42. However, in its Attachment to the Motion in Limine, identifying the "offending" statements, Entergy does not identify a single reference to Commitment 42 in those documents. NYS-38 is not focused on what Entergy has agreed to do in its commitments, but rather on what Entergy has *not* agreed to do and will *not* do - *i.e.*, it is has not agreed to make the details of its plan to address cracking in portions of the steam generators, including the propagation of those cracks into safety related components, prior to the conclusion of these hearings and the proposed commencement of an extended period of operation. It is Entergy, not New York, that keeps raising Commitment 42 and asserting that NYS-38 is limited to only challenging Commitment 41. This attempt by Entergy to create a narrow contention focused on a single Entergy commitment is not only inconsistent with NYS-38, which does not mention Commitment 41, but has already been rejected by the Board in its December 6, 2011 Clarification Order as discussed in more detail in this submission.

<sup>2</sup> NYS-38 was necessarily focused on the SSER, not previously filed or amended Commitments by Entergy, since the trigger for the timely filing of that contention was the publication of the SSER and Staff's agreement in the SSER to accept Entergy's proposed approach to delay providing the details of its plan to address PWSCC in steam generator components.

specifics regarding all of its plans to address the problem of cracking that begins with the divider plate assemblies and spreads. Those pages of the SSER demonstrate cracking of divider plate assemblies is a safety related concern because, *inter alia*, of the potential impact on “tube-to-tubesheet welds.”

The staff noted that, although these SG divider plate assembly cracks might not have a significant safety impact in and of themselves, these cracks could affect adjacent items that are part of the reactor coolant pressure boundary, such as the tubesheet and the channel head, if they propagate to the boundary with these items. The staff further noted that for the tubesheet, PWSCC cracks in the divider plate assemblies fabricated from Alloy 600 and its associated weld metals could propagate to the tubesheet cladding, with possible consequences to the integrity of the tube-to-tubesheet welds.

SSER at 18. Thus, when the bases for NYS-38 assert that “Entergy has acknowledged a problem with primary water stress corrosion cracking (“PWSCC”) for the nickel alloy or nickel-alloy clad steam generator (“SG”) divider plates exposed to reactor coolant, *a problem which could impact components directly relevant to plant safety*. SSER at 3-18 to 3-19” (Contention filing at 2 (emphasis added)), the contention directly references the portion of the SSER that links problems with divider plates cracking and tube-to-tubesheet welds and the need to have disclosed plans for inspections of those components.

If NYS-38 had not made that linkage, *i.e.*, if the problems with the divider plate welds did not implicate the tube-to-tubesheet welds, Entergy or Staff might have argued that NYS-38 was not admissible as it would not implicate a material safety issue. The SSER notes that “these SG divider plate assembly cracks might not have a significant safety impact in and of themselves” and it is only because they can propagate to safety significant components that there is any safety concern. SSER at 3-18.<sup>3</sup> However, as NYS-38 points out, Entergy’s plan to address these safety

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<sup>3</sup> The State also presented evidence that the failure of the steam generator divider plate could also impede the heat transfer function of the steam generator and interfere with its heat sink function. *See, e.g.*, Pre-filed Testimony of Dr. Richard T. Lahey at 20 (Exhibit NYS000374); Report of Dr. David Duquette at 11 (Exhibit NYS000373).

problems involves (1) waiting for an industry standard that has yet to be developed and (2) engaging in some undefined inspection program, the details of which are not to be provided for years, in order to ascertain whether SG divider plate assembly cracks are creating cracking of critical safety components, like tube-to-tubesheet welds.

Moreover, in his September 30, 2011 declaration, Dr. Lahey discussed both the divider plate assembly and the tube-to-tube sheet welds. Lahey Declaration at ¶¶ 5, 6 (available in ADAMS package ML11273A190).

### STEAM GENERATORS

5. The details of the inspections for primary water stress corrosion cracking (PWSCC) in the steam generator's divider plates will apparently not be available until well after extended operations are expected to begin.

6. Inspections of the steam generator's tube-to-tubesheet welds in IP-2 for PWSCC will not be made until sometime between March 2020 and March 2024 (i.e., well after the proposed extended operation period has begun). This is particularly troubling since these welds form part of the primary system's pressure boundary, and if they fail radiation may be released to the secondary side and also to the environment.

Dr. Lahey was reinforcing the statement in NYS-38 and the SSER that the safety significance of divider plate assembly cracks is their potential to propagate to critical safety components like tube-to-tubesheet welds. Not only did Dr. Lahey's supporting declaration specifically discuss this, but *Entergy's own Answer also acknowledged the tube-to-tubesheet weld issue*. Entergy Opposition To Contention at 24, n. 94. While Entergy asserted in its opposition to NYS-38 that this statement by Dr. Lahey was outside the scope of the Contention (*id.*), it did not move to strike that portion of his declaration. Rather, it is clear Entergy comprehended the relevance of what Dr. Lahey was saying and its relation to NYS-38. On the preceding page of its Opposition, Entergy recognized that the thrust of NYS-38 was that cracks in the divider plates could impact critical components of the reactor that are attached to the divider plates, quoting from the

relevant portion of the Contention Filing. Entergy Opposition To Contention at 23, n. 88 (“Industry experience as accumulated by EPRI and others has confirmed that water chemistry control is insufficient to prevent cracking in divider plates for steam generator tubes and that some of these divider plates are attached to components of the reactor that are critical for safety and that may be adversely affected by such cracking.’ New Contention at 7”). In short, Entergy has known since NYS-38 was filed of the concern with cracking in the safety related components whose integrity could be affected by divider plate assemblies, components identified in the SSER pages referenced in the bases for the contention and that are referenced in both the Contention Filing and sought to be refuted in Entergy’s Opposition To Contention.

Entergy not only misreads the record of NYS-38 it also misreads this Board’s rulings on the admissibility of NYS-38. In its initial ruling on NYS-38, the Board held that “Intervenors have broadly contended, relying on multiple bases, that Entergy’s new commitments do not meet NRC regulations for having a program that will adequately manage the effects of aging during the period of extended operations.” *Entergy Nuclear Operations, Inc.* (Indian Point Generating Units 2 and 3), Memorandum and Order (Admitting New Contention NYS-38/RK-TC-5) November 10, 2011 (“Initial Admission Order”) at 10 (fn. omitted). The Board summarized the basis for NYS-38, focusing in part, as does NYS-38, on the proposed delayed development of an adequate inspection program.

“These bases are that Entergy . . . has not adequately defined how it will manage primary water stress corrosion cracking (PWSCC) because it will not begin inspections until after entering the period of extended operations and Entergy has substituted a document, which will not be released until 2013, for its prior water chemistry program to manage PWSCC of the nickel alloy or nickel-alloy clad steam generator divider plates exposed to reactor coolant.”

*Id.* at 10-11, n. 47.

Were there any doubt that the Board intended to admit NYS-38 on the basis that it was a

broad challenge to all of Entergy's deferred inspection programs as they relate to PWSCC and was not limited only to Commitment 41, which relates to inspections of steam generator divider plates exposed to reactor coolant, that doubt was resolved by the Board's December 6, 2011 Clarification Order. As it does here, Entergy there sought to limit NYS-38, as it relates to concerns with PWSCC, to Commitment 41. The Board clarified its earlier Order and ruled

“[t]he language of our November 10, 2011 Memorandum and Order did not limit NYS-38/RK-TC-5 solely to Commitment 41. Rather, in finding NYS-38/RK-TC-5 admissible, we admitted the Intervenors' 'broad' contention, which relied on 'multiple bases' including the 'claim that there is insufficient information in Entergy's recent commitments' that were addressed in the SSER.”

*Entergy Nuclear Operations, Inc.* (Indian Point Generating Units 2 and 3), Clarification Order at 3. Entergy essentially ignores this ruling, a ruling it neither sought to have reconsidered nor sought to have reviewed by the Commission on an interlocutory basis. Essentially, the Motion in Limine is a thinly disguised challenge to a ruling the Board issued 7 months ago. For the same reasons already articulated by the Board, the Motion in Limine should be denied.

### **B. Entergy Is Legally Wrong**

The legal question raised by Entergy's Motion is not whether testimony that is clearly outside the scope of an admitted contention and its bases should be stricken, but rather what standards should be used in deciding whether the testimony is outside the scope of an admitted contention and its bases. Entergy's view of that legal question represents a gross distortion of Commission practice and would, if adopted, plunge NRC proceedings into the abyss of common law pleading technicalities that led to the 1937 modernization of the Federal Rules of Civil Procedure. According to Entergy, the fact that the scope of a contention is defined by its bases requires that the bases be examined with a fine toothed comb and that inferences that can be reasonably drawn from the bases as to their scope, should be ignored. Thus, although NYS-38 is

addressed to the inadequate detail in Entergy's proposed approach to address PWSCC in steam generator components and identifies portions of the SSER that specifically link cracks in divider plates to crack propagation to safety related components like tube-to-tubesheet welds and specifically indicates that it is these propagation cracks in safety related components that are of concern, nonetheless NYS-38 should not be read to include a challenge to Commitment 42 which, with Commitment 41, addresses inspections of divider plates and tube-to-tubesheet welds. That kind of fly-specking has been rejected by the Federal Rules in favor of rules that are to be "construed and administered to secure the just, speedy, and inexpensive determination of every action." Federal Rules of Civil Procedure (Fed. R. Civ. P.) Rule 1.

NRC frequently looks to the Federal Rules of Evidence and the Federal Rules of Civil Procedure ("Fed.R.Civ.P.") for guidance. For example: *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site) Docket No. 52-008-ESP; ASLBP No. 04-822-02-ESP, 2007 NRC LEXIS 51 (March 20, 2007) (referencing Rule 30(b)(6) of the Federal Rules of Civil Procedure to define the requirements for hearing witnesses); *U.S. Department Of Energy* (High Level Waste Repository: Pre-Application Matters) Docket No. PAPO-00; ASLBP No. 04-829-01-PAPO, 2007 NRC LEXIS 52 (April 19, 2007) (referencing Rule 26(b)(5) of the Federal Rules of Civil Procedure with regard to privilege logs); and *Entergy Nuclear Vt. Yankee*, Docket No. 50-271-LR; ASLBP No. 06-849-03-LR, 2007 NRC LEXIS 90 (August 10, 2007) ("In general, the Commission applies the same standard that the federal courts apply when ruling on motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure."); *see also* 69 Fed. Reg. 2182, 2187, Changes to Adjudicatory Process (January 14, 2004) ("Although the Commission has not required the application of the Federal Rules of Evidence in NRC adjudicatory proceedings, presiding officers and Licensing Boards have always looked to the

Federal Rules for guidance in appropriate circumstances.”).

The Federal Courts have had numerous occasions to pass on the criteria to be used in interpreting those rules.

The Federal Rules reject the approach that pleading is a game of skill in which one misstep by counsel may be decisive to the outcome and accept the principle that the purpose of pleading is to facilitate a proper decision on the merits. *Cf. Maty v. Grasselli Chemical Co.*, 303 U.S. 197.

*Conley v. Gibson*, 355 U.S. 41, 48 (1957). Recent Supreme Court decisions, while increasing the obligation on a plaintiff to describe in some detail the basis for a claim, much as NRC has done with its requirement for “a brief explanation of the basis” for a contention (10 C.F.R. § 2.309(f)(1)(ii)), continue to apply the practical standards adopted in *Conley* that judge the adequacy of a pleading by whether it will “‘give the defendant fair notice of what the . . . claim is and the grounds upon which it rests,’ *Conley v. Gibson*, 355 U.S. 41, 47, 78 S. Ct. 99, 2 L. Ed. 2d 80 (1957).” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007).

There is no doubt that Entergy knows, and has known ever since it objected to language appearing in the September 30, 2011 Declaration of Dr. Lahey linking NYS-38 to the propagation of cracks in divider plates to the tube-to-tubesheet welds (Entergy Opposition To Contention at 24, n. 94) and ever since it filed its Clarification Motion, that NYS-38 was concerned with this issue. Thus, its current Motion, in addition to merely rehashing arguments it already made and lost when it filed its Clarification Motion, is based on its attempt to turn the pleading requirements of the NRC into a “game of skill” rather than to “facilitate a proper decision on the merits.” *Conley*, 355 U.S. at 48.

Entergy will also find no support for its Motion in the long-standing principle that the contention requirements of Part 2 are “strict by design.” As the Commission made clear when it first articulated that concept, the purpose of the bases requirements is not to place a straightjacket

on legitimate issues raised by intervenors but to avoid speculative contentions and provide sufficient information to assure that an applicant is on notice of the concerns raised by the intervenors.

Our contention rule is strict by design. The Commission toughened it in 1989 because in prior years “licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.” *Oconee*, 49 NRC at 334. . . . The Commission responded with the 1989 contention rule revisions, which insist upon some “*reasonably specific factual and legal*” basis for the contention. See *Oconee*, 49 NRC at 334; see also Final Rule, 54 Fed. Reg. at 33,171. Under the rule, presiding officers may not admit open-ended or ill-defined contentions lacking in specificity or basis. See 10 C.F.R. § 2.714(b); see generally Final Rule, 54 Fed. Reg. 33,168. Petitioners “must articulate at the outset the specific issues they wish to litigate as a prerequisite to gaining formal admission as parties.” *Oconee*, 49 NRC at 388. See also *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998).

*Dominion Nuclear Connecticut Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 N.R.C. 349, 358-59 (2001)(emphasis added). The State of New York notes that the *Millstone* proceeding involved an objection by citizen groups to the relocation of effluent controls from technical specifications to a manual, known by the acronym “REMODOCM.” In rejecting the groups’ efforts to initiate a proceeding, the Commissioners found the petitioners’ “allegations surely fall short of an admissible contention, for they fail to offer *any* specific explanation, factual or legal, for why the consequences they fear will occur if these particular technical specifications are transferred to the REMODOCM” and that their statements “evinced little familiarity” with nuclear plant operations. 54 N.R.C. at 360 (emphasis added). In contrast, in Contention NYS-38 / RK-TC-5, the State has not sought review of inchoate, vague or speculative theories, but rather has presented a clearly explained contention and statements from nationally recognized engineering experts.

Finally, Entergy’s Motion in *Limine* is based on an interpretation of the standards for limiting testimony that are at odds with this Board’s prior rulings on the proper use of *in limine*

motions. Contrary to those rulings Entergy's Motion is based on reading NYS-38 and its bases as narrowly as possible, ignoring specific statements in the bases and ignoring the information contained in the cited references that would put any reader on notice that NYS-38 is concerned with the delay in the development of inspection plans for all aspects of the steam generator components that are vulnerable to PWSCC.

In assessing motions in limine in this proceeding, the Board has focused on the "scope of the Contention's reasonably inferred bounds." *Entergy Nuclear Operations, Inc.* (Indian Point Generating Units 2 and 3), Order (Granting in Part and Denying in Part Applicant's Motions in Limine) at 10 (Mar. 6, 2012) (unpublished) ("March 6, 2012 Board Order"). The Board noted that NRC's licensing process is "dynamic." *Id.* at 3-4 (*quoting Curators of the Univ. of Missouri* (TRUMP-S Project), CLI-95-08, 41 N.R.C. 386, 395 (1995)). The Board recognized that, in evaluating motions in limine, the issue is whether "distinctly new complaints [have been] add[ed] . . . stretching the scope of admitted contentions beyond their *reasonably inferred bounds.*" March 6, 2012 Board Order at 3-4 (*quoting Entergy Nuclear Generation Co. & Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 N.R.C. 287, 309 (2010) (emphasis added)). Rather than exclude evidence, the Board has generally opted to "give all evidence its appropriate weight at evidentiary hearing in the context of evaluating the specific issue before [it]." March 6, 2012 Board Order at 20; *see also id.* at 24; *cf.* Licensing Board Order (Denying New York's Motion in Limine and Holding Riverkeeper's Motion in Limine in Abeyance) at 6 (June 1, 2012) (unpublished) ("While some of the testimony provided by Entergy and the NRC Staff might appear as statements of a witness's opinion as to what the law requires, we are comfortable exercising our responsibility to interpret independently what the law is.").

## **II. ENERGY'S ATTACK ON DR. HOPENFELD AND RIVERKEEPER'S EXHIBITS LACKS MERIT**

Entergy would prefer that the ASLB not review documents concerning Dr. Hopenfled's involvement with aging degradation of steam generators, reactor vessels, and other components. At the same time Entergy questions Dr. Hopenfled's experience – experience gained while employed by the Nuclear Regulatory Commission and private sector. Entergy cannot have it both ways. Having decided to try to discredit Dr. Hopenfled, it should not be allowed to preclude the introduction of documents into the record that support Dr. Hopenfled experience.

At various junctures in this proceeding, Entergy has lodged sweeping criticisms about the ability of Dr. Hopenfled to provide expert testimony in relation to the aging phenomenon of metal fatigue. For example, it is no secret that in January 2012 Entergy argued that Riverkeeper has not carried its burden of demonstrating that Dr. Hopenfled holds any specialized knowledge in the field of metal fatigue analysis, such that he can assist the Board in understanding the evidence. March 6, 2012 Board Order at 14-15 (rejecting Entergy's argument).<sup>4</sup> Subsequently, in Entergy's Statement of Position relating to Consolidated Contention NYS-26B/RK-TC-1B, Entergy once again took issue with Dr. Hopenfled's expertise on metal fatigue issues. Entergy again claimed that Dr. Hopenfled held no specialized knowledge in the field of metal fatigue, and argued that, as a result, the Board "should accord little or no weight to" his testimony. Entergy's Statement of Position Regarding Contention NYS-26B/RK-TC-1B (Metal Fatigue) (March 29, 2012) (ENT000182), at 28-29, ADAMS Accession No. ML12089A240.

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<sup>4</sup> Entergy has designated the entirety of its January 30, 2012 Motion in Limine as confidential. Riverkeeper respectfully refers the Board to 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) (January 30, 2012), at 7-9, for a discussion of Entergy's litigation approach to Dr. Hopenfled in this proceeding.

The exhibits Entergy now objects to speak directly to the ample expertise held by Dr. Hopenfeld pertaining to relevant metal fatigue issues. In light of Entergy's vehement and repeated attempts to refute Dr. Hopenfeld's credibility and expertise, information demonstrating his ability to testify to such issues is highly relevant to joint contention NYS-26B/RK-TC-5, for which Dr. Hopenfeld testifies specifically in relation to metal fatigue.

There is simply no basis for Entergy's claim that there is "no apparent nexus" between the documents provided as exhibits, and the admitted contention. To the contrary, Dr. Hopenfeld's testimony specifically explains how the relevant supporting documents relate to and demonstrate his expertise in *metal fatigue* related issues. See Pre-filed Written Testimony of Dr. Joram Hopenfeld Regarding Contention NYS-38/RK-TC-5 (June 19, 2012) (RIV000102), at 2-4. In particular, Exhibit RIV000103 (J. Hopenfeld et al., *Small Sodium to Gas Leak Behavior in Relation to LMFBR Leak Detection*, Int'l Conference on Liquid Metal Tech. (May 1976)) relates to the effects of the leak environment on *fatigue* crack growth in sodium. Similarly, Exhibits RIV000104 (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)) and 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 2001)) relate to steam generator degradation issues that Dr. Hopenfeld was extensively involved in, including crack detection, and, as explained in Dr. Hopenfeld's testimony, the subject of these documents, including "crack formation and detection" is "directly related to fatigue analysis and fatigue management." Lastly, RIV000106 (Associated Press, *Nuke inspectors focus on 'unusual' wear on tubes*, Fox News.com (Feb. 3, 2012)), also relates to and demonstrates Dr. Hopenfeld's

experience, familiarity, and expertise with tube degradation issues, which, once again, relate to metal fatigue. *See* Pre-filed Written Testimony of Dr. Joram Hopenfeld Regarding Contention NYS-38/RK-TC-5 (June 19, 2012) (RIV000102), at 2-4.

In sum, the exhibits which Entergy objects to were offered to, and in fact, elucidate the relevant experience and expertise that Dr. Hopenfeld holds with respect to metal fatigue related issues, and squarely supports Dr. Hopenfeld's testimony on joint contention NYS-38/RK-TC-5. Entergy's attempt to exclude these exhibits is, thus, completely unfounded, especially in light of Entergy's position relating to Dr. Hopenfeld's expertise on such issues.

The ASLB should, therefore, deny Entergy's request to exclude Riverkeeper Exhibits RIV000103, RIV000104, RIV000105, and RIV000106. Exclusion is particularly improper since the ASLB is well suited to afford the weight it deems necessary to such exhibits.<sup>5</sup>

### CONCLUSION

The State or New York and Riverkeeper request that the Atomic Safety and Licensing Board deny Entergy's motion in limine.

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<sup>5</sup> *See Amergen Energy Comp, LLC* (Oyster Creek Nuclear Generating Station, Docket No. 50-0219-LR, ASLBP No. 06-844-01-LR, 2007 NRC LEXIS 120, \*1 (Sept. 12, 2007) (explaining how licensing board chose to "refrain from actually expunging [any] irrelevant material from the record [r]ather, to the extent we conclude that material is irrelevant or otherwise inadmissible, we will accord it no weight"); *Amergen Energy Comp., LLC*, (License Renewal for Oyster Creek Nuclear Generating Station), Docket No. 50-0219-LR, ASLBP No. 06-844-01-LR, Memorandum and Order (Ruling on Motions in Limine and Motion for Clarification), August 9, 2007, at 2, ADAMS Accession No. ML072210832; *Nuclear Innovation North America, LLC*, (South Texas Project Units 3 and 4), Docket Nos. 52-12-COL and 52-13-COL, ASLBP No. 09-885-08-COL-BD01, Order (Ruling on Motions in Limine), July 14, 2011, at 3, ADAMS Accession No. ML11195A093.

Respectfully submitted,

***Signed (electronically) by***

---

John J. Sipos  
Assistant Attorney General  
Office of the Attorney General  
for the State of New York  
The Capitol  
Albany, New York 12227  
(518) 402-2251

***Signed (electronically) by***

---

Kathryn Liberatore  
Assistant Attorney General  
Office of the Attorney General  
for the State of New York  
120 Broadway  
New York, New York 10271  
(212) 416-8482

***Signed (electronically) by***

---

Deborah Brancato, Esq.  
Riverkeeper, Inc.  
20 Secor Road  
Ossining, New York 10562  
(914) 478-4501

July 16, 2012

**10 C.F.R. § 2.323 Certification**

In accordance with the Board's Scheduling Order of July 1, 2010 (at 8-9) and 10 C.F.R. § 2.323(b), the undersigned counsel hereby certifies that counsel for the State of New York and Riverkeeper have participated in discussions initiated by Entergy Nuclear Operations, Inc. ("Entergy" or the "movant"), with the movant and NRC Staff, concerning Entergy's Motion in Limine to Exclude Portions of Intervenors' Pre-Filed direct Testimony, Expert Report, Statement of Position, and Exhibits for Contention NYS-38/RK-TC-5, filed on July 6, 2012 in this matter, and has made a sincere effort to make themselves available to listen and respond to the movant and NRC Staff, and to resolve the factual and legal issues raised in the motions. The State of New York and Riverkeeper's efforts to resolve the issues have been unsuccessful. During said consultation, NRC Staff informed the parties that it would not file a submission in connection with the motion.

***Signed (electronically) by*** \_\_\_\_\_

John J. Sipos  
Assistant Attorney General  
Office of the Attorney General  
for the State of New York  
The Capitol  
Albany, New York 12227  
(518) 402-2251

***Signed (electronically) by*** \_\_\_\_\_

Deborah Brancato, Esq.  
Riverkeeper, Inc.  
20 Secor Road  
Ossining, New York 10562  
(914) 478-4501

July 16, 2012

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

**ATOMIC SAFETY AND LICENSING BOARD**

-----x  
In re: Docket Nos. 50-247-LR and 50-286-LR  
  
License Renewal Application Submitted by ASLBP No. 07-858-03-LR-BD01  
  
Entergy Nuclear Indian Point 2, LLC, DPR-26, DPR-64  
Entergy Nuclear Indian Point 3, LLC, and  
Entergy Nuclear Operations, Inc. July 16, 2012  
-----x

**CERTIFICATE OF SERVICE**

I hereby certify that on July 16, 2012, copies of the State of New York and Riverkeeper's Joint Answer to Entergy's Motion In Limine on Contention NYS-38/RK-TC-5 were served electronically via the Electronic Information Exchange on the following recipients:

Lawrence G. McDade, Chair  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Mailstop 3 F23  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852-2738  
Lawrence.McDade@nrc.gov

Michael F. Kennedy  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Mailstop 3 F23  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852-2738  
Michael.Kennedy@nrc.gov

Richard E. Wardwell  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Mailstop 3 F23  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852-2738  
Richard.Wardwell@nrc.gov

Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Mailstop 3 F23  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852-2738

Shelbie Lewman, Esq. Law Clerk  
Anne Siarnacki, Esq., Law Clerk  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Mailstop 3 F23  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852-2738  
Shelbie.Lewman@nrc.gov  
Anne.Siarnacki@nrc.gov

Office of Commission Appellate  
Adjudication  
U.S. Nuclear Regulatory Commission  
Mailstop 16 G4  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
ocaamail@nrc.gov

Office of the Secretary  
Attn: Rulemaking and Adjudications Staff  
U.S. Nuclear Regulatory Commission  
Mailstop 3 F23  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852-2738  
hearingdocket@nrc.gov

Sherwin E. Turk, Esq.  
David E. Roth, Esq.  
Beth N. Mizuno, Esq.  
Brian G. Harris, Esq.  
Anita Ghosh, Esq.  
Office of the General Counsel  
U.S. Nuclear Regulatory Commission  
Mailstop 15 D21  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
sherwin.turk@nrc.gov  
david.roth@nrc.gov  
beth.mizuno@nrc.gov  
brian.harris@nrc.gov  
anita.ghosh@nrc.gov

Kathryn M. Sutton, Esq.  
Paul M. Bessette, Esq.  
Jonathan Rund, Esq.  
Raphael Kuyler, Esq.  
Morgan, Lewis & Bockius LLP  
1111 Pennsylvania Avenue, NW  
Washington, DC 20004  
ksutton@morganlewis.com  
pbessette@morganlewis.com  
jrund@morganlewis.com  
rkuyler@morganlewis.com

Martin J. O'Neill, Esq.  
Morgan, Lewis & Bockius LLP  
Suite 4000  
1000 Louisiana Street  
Houston, TX 77002  
martin.o'neill@morganlewis.com

Elise N. Zoli, Esq.  
Goodwin Procter, LLP  
Exchange Place  
53 State Street  
Boston, MA 02109  
ezoli@goodwinprocter.com

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

Robert D. Snook, Esq.  
Assistant Attorney General  
Office of the Attorney General  
State of Connecticut  
55 Elm Street  
P.O. Box 120  
Hartford, CT 06141-0120  
robert.snook@ct.gov

Melissa-Jean Rotini, Esq.  
Assistant County Attorney  
Office of the Westchester County Attorney  
Michaelian Office Building  
148 Martine Avenue, 6th Floor  
White Plains, NY 10601  
MJR1@westchestergov.com

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

Daniel Riesel, Esq.  
Thomas F. Wood, Esq.  
Victoria S. Treanor, Esq.  
Sive, Paget & Riesel, P.C.  
460 Park Avenue  
New York, NY 10022  
driese@sprlaw.com  
vtreanor@sprlaw.com

Michael J. Delaney, Esq.  
Director  
Energy Regulatory Affairs  
NYC Department of Environmental  
Protection  
59-17 Junction Boulevard  
Flushing, NY 11373  
(718) 595-3982  
mdelaney@dep.nyc.gov

Manna Jo Greene, Director  
Karla Raimundi, Environmental Justice  
Associate  
Stephen Filler, Esq., Board Member  
Hudson River Sloop Clearwater, Inc.  
724 Wolcott Avenue  
Beacon, NY 12508  
Mannajo@clearwater.org  
karla@clearwater.org  
stephenfiller@gmail.com

Phillip Musegaas, Esq.  
Deborah Brancato, Esq.  
Riverkeeper, Inc.  
20 Secor Road  
Ossining, NY 10562  
phillip@riverkeeper.org  
dbrancato@riverkeeper.org

*Signed (electronically) by*

---

John J. Sipos  
Assistant Attorney General  
State of New York  
(518) 402-2251

Dated at Albany, New York  
this 16th day of July 2012