# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

| In the Matter of                                | )                      |             |
|---|------------------------|-------------|
| ENTERGY NUCLEAR OPERATIONS,                     | NC.) Docket Nos. 50-24 | 7-LR/286-LR |
| (Indian Point Nuclear Generating Units 2 and 3) | )                      |             |

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 RIVERKEEPER TC-2
(FLOW-ACCELERATED CORROSION)

Pursuant to 10 C.F.R. § 2.323(c) and the February 1, 2012 Order of the Atomic Safety and Licensing Board (Board) in this proceeding, the staff of the U.S. Nuclear Regulatory Commission (NRC Staff) responds to the January 30, 2012 motion *in limine* filed by Entergy Nuclear Operations, Inc. (Entergy) to exclude portions of pre-filed testimony and exhibits submitted by Riverkeeper, Inc. (Riverkeeper) in support of Contention RK-TC-2 (Flow Accelerated Corrosion). For the reasons set forth below and in Entergy's Motion, the Staff supports Entergy's motion to exclude the specified portions of the Intervenors' testimony and exhibits.

#### **DISCUSSION**

#### I. <u>Legal Standards Governing Motions in Limine</u>.

In an evidentiary hearing, "[o]nly relevant, material, and reliable evidence which is not unduly repetitious will be admitted. Immaterial or irrelevant parts of an admissible document will

<sup>&</sup>lt;sup>1</sup> Entergy's Motion *In Limine* to Exclude Portions of Pre-Filed Direct Testimony, Expert Report, Exhibits, and Statement of Position for Contention Riverkeeper TC-2 (Flow-Accelerated Corrosion) (Jan. 30, 2012) (Motion).

be segregated and excluded so far as is practicable." 10 C.F.R. § 2.337(a). While the "strict rules of evidence do not apply to written submissions," the Board may "on motion or on the presiding officer's own initiative, strike any portion of a written presentation or a response to a written question that is irrelevant, immaterial, unreliable, duplicative or cumulative." 10 C.F.R. § 2.319(d). See also 10 C.F.R. § 2.319(e).

NRC hearings are limited to the scope of the admitted contentions. It is well established that if an intervenor proffers testimony or evidence outside the scope of the admitted contentions, it will be excluded. *See, e.g., Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-10-5, 71 NRC 90, 100 (2010) (agreeing with the Staff that the licensing board had properly excluded the intervenors' testimony and exhibits that were outside the scope of the admitted contention). As the Commission explained:

The scope of a contention is limited to issues of law and fact pled with particularity in the intervention petition, including its stated bases, unless the contention is satisfactorily amended in accordance with our rules. Otherwise, NRC adjudications quickly would lose order. Parties and licensing boards must be on notice of the issues being litigated, so that parties and boards may prepare for summary disposition or for hearing. Our procedural rules on contentions are designed to ensure focused and fair proceedings.

Id. at 100-01 (internal footnotes omitted).

Recently the Commission emphasized:

We have long required contention claims to be set forth "with particularity," stressing that it "should not be necessary to speculate about what a pleading is supposed to mean." Our proceedings would prove unmanageable—and unfair to the other parties—if an intervenor could freely change an admitted contention "at will as litigation progresses," "stretching the scope of admitted contentions beyond their reasonably inferred bounds." "Petitioners must raise and reasonably specify at the outset their objections to a license application."

Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-12-01, 75 NRC \_\_ (Feb. 9, 2012) (slip op. at 22-23) (internal citations omitted).

Further, an expert opinion is only admissible if the witness is competent to give an expert opinion and adequately states and explains the factual basis for the expert opinion. *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-05-04, 61 NRC 71, 81 (2005). An admissible expert opinion must be "based upon sufficient facts or data to be the product of reliable principles and methods that the witness applied to the facts of the case." *Id.* at 80. In addition, a party bears the burden of demonstrating that its witness is qualified to serve as an expert. *Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27 (2004). "A witness may qualify as an expert by knowledge, skill, experience, training, or education to testify [i]f scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue." *Id.* at 27-28 (internal quotation marks omitted, alteration in original).

### II. <u>Entergy's Motion in Limine</u>

Riverkeeper Contention TC-2 contends that Entergy's program for the aging management of Flow Accelerated Corrosion (FAC) fails to comply with the requirements of 10 C.F.R. § 54.21(a)(3) to demonstrate that the effects of aging will be adequately managed for the period of extended operation.<sup>2</sup> In admitting this contention, the Board described the contention as

(1) Entergy's AMP for components affected by FAC is deficient because it does not provide sufficient details (e.g., inspection method and frequency, criteria for component repair or replacement) to demonstrate that the intended functions of the applicable components will be maintained during the extended period of operation; and (2) Entergy's program relies on the results from CHECWORKS without benchmarking or a track record of performance at IPEC's power uprate.[3]

<sup>&</sup>lt;sup>2</sup> See "Riverkeeper, Inc.'s Request for Hearing and Petition to Intervene in the License Renewal Proceeding for the Indian Point Nuclear Power Plant" (Riverkeeper Petition) (Nov. 30, 2007), at 15.

<sup>&</sup>lt;sup>3</sup> Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3), LBP-08-13, (continued. . .)

On July 26, 2010, Entergy filed a motion for the summary disposition of RK-TC-2. The NRC Staff and Riverkeeper, Inc. filed Answers supporting<sup>4</sup> and opposing the motion respectively.<sup>5</sup> On November 4, 2010, the Board denied the motion for summary disposition.<sup>6</sup>

On December 22, 2011, Riverkeeper filed its statement of position, testimony, and exhibits (labelled RIV000001 through RIV000033) on this contention. Included among the filings were Prefiled Testimony of Joram Hopenfeld in Support of RK-TC-2 (Testimony),<sup>7</sup> the Report of Joram Hopenfeld in Support of RK-TC-2 (Report),<sup>8</sup> and the Riverkeeper Initial Statement of Position Regarding Contention RK-TC-2 (Position Statement).<sup>9</sup>

In its Motion, Entergy seeks, pursuant to 10 C.F.R. § 2.337, to exclude certain specified portions of Dr. Hopenfeld's Testimony, Report, and the Position Statement on the grounds that the information (1) falls outside the scope of the admitted RK-TC-2 contention, (2) falls outside the scope of this proceeding, or (3) concerns matters outside Dr. Hopenfeld's area of expertise. Motion at 1-2. In "Attachment 1" to its Motion, Entergy identifies the specific portions of the

(. . .continued) 68 NRC 43, 177 (2008).

<sup>&</sup>lt;sup>4</sup> NRC Staff's Answer to Applicant's Motion for Summary Disposition of Riverkeeper Technical Contention 2 (Flow-Accelerated Corrosion) (Aug. 16, 2010).

<sup>&</sup>lt;sup>5</sup> Riverkeeper Opposition to Entergy's Motion for Summary Disposition of Riverkeeper Technical Contention 2 (Flow-Accelerated Corrosion) (Aug. 16, 2010).

<sup>&</sup>lt;sup>6</sup> Memorandum and Order (Ruling on Entergy's Motion for Summary Disposition of Riverkeeper TC-2 (Flow-Accelerated Corrosion)) (Nov. 4, 2010) (unpublished) (ADAMS Accession No. ML103080994).

<sup>&</sup>lt;sup>7</sup> Exh. RIV000003, Pre-filed Written Testimony of Dr. Joram Hopenfeld Regarding Riverkeeper Contention TC-2 - Flow Accelerated Corrosion (Dec. 22, 2011).

<sup>&</sup>lt;sup>8</sup> Exh. RIV000005, Report of Dr. Joram Hopenfeld in Support of Riverkeeper Contention TC-2 - Flow Accelerated Corrosion (Dec. 22, 2011).

<sup>&</sup>lt;sup>9</sup> Exh. RIV000002, Riverkeeper Initial Statement of Position Regarding Contention RK-TC-2 (Flow Accelerated Corrosion) (Dec. 22, 2011).

Intervenors' filing that it seeks to exclude, along with a statement of the reason(s) supporting its view that those matters should be excluded. In addition to the three reasons listed above, Entergy seeks to strike statements for failure to place the supporting document into evidence, seeks to strike documents which are relied upon only by inadmissible portions of the Hopenfeld Report and Position Statement, and seeks to strike the lines of the Position Statement which relied upon the inadmissible parts of Dr. Hopenfeld's testimony and report. See Attachment 1 at 3-5.

The Staff has reviewed Entergy's Motion and Attachments, and agrees with Entergy's view that the matters identified therein should be excluded from evidence on this contention.

The Staff's reasoning is provided below.

Entergy discusses how Riverkeeper's filings on FAC include statements regarding loss of coolant accidents (LOCA), probabilistic risk assessments (PRA), seismic vulnerabilities, station blackout (SBO), and metal fatigue. *See* Motion at 7-12. For each of these topics, Entergy states that these issues are entirely new, are unaddressed by prior pleadings on FAC, and these topics cannot be reasonably inferred from the prior filings on FAC and accordingly should be excluded under 10 C.F.R. §§ 2.319(d) and 2.337(a). *See e.g.* Motion at 12. The Staff agrees with Entergy; the discussions provided by Dr. Hopenfeld in his report and testimony on LOCA, PRA, seismic issues, SBO, and metal fatigue are not relevant to RK-TC-2. The topics and statements quoted by Entergy in Attachment 1 to its Motion are new issues and not material to the issue of whether the FAC program maintains the reactors within their current licensing bases.

Entergy next argues that topics of LOCA, PRA, seismic design, and SBO are all outside the scope of a license renewal proceeding because the concerns expressed by Riverkeeper are concerns with the adequacy of current licensing basis (CLB), and, in the case of SBO, soon to be the subject of rulemaking. *Id.* at 13. The testimony and report of Dr. Hopenfeld that Entergy

seeks to strike presume that the CLB will not be maintained and then assert consequences. See Motion, Attachment 1 at 1-3. Dr. Hopenfeld makes claims about the adequacy of the CLB with respect to considerations in the original PRAs, current relative risk from earthquakes, and the ability of the plant to withstand transient loads such as station blackouts. See id. The Commission's rules state that if there is not reasonable assurance that operations will be conducted in accordance with the CLB during the current license term, then the licensee shall take measures under its current license, as appropriate, to ensure that the intended function of systems, structures or components will be maintained in accordance with the CLB throughout the term of its current license. 10 C.F.R. § 54.30(a). However, compliance with the CLB is not within the scope of the license renewal review. 10 C.F.R. § 54.30(b). Instead, the standards for issuance of a renewed license include continuation of the CLB with respect to the limited topic of managing the effects of aging for a specific set of structures and components. 10 C.F.R. § 54.29(a). Therefore, the Staff agrees that these claims against the CLB are outside the scope of license renewal and should be struck for the reasons given by Entergy.

Entergy asserts that Riverkeeper has not shown that Dr. Hopenfeld has the requisite knowledge, skill, experience, training, and education to give testimony in the areas of PRA, seismic design, SBO, and metal fatigue. Motion at 13-14. Entergy notes that Dr. Hopenfeld's *Curriculum Vitae* (CV) describes graduate degrees in engineering and more than 45 years of experience. *Id.* at 14 n. 65. Nonetheless, Entergy observes that Dr. Hopenfeld's CV is silent on PRA, seismic design, and SBO. *Id.* at 13. Further, Entergy asserts that Dr. Hopenfeld is not qualified to testify on metal fatigue. *Id.* at 14.

The Staff agrees that Dr. Hopenfeld's CV does not explicitly discuss the topics of PRA, seismic design, and SBO, and thus he shows no special expertise on these topics and his testimony should be stricken. With respect to Dr. Hopenfeld's qualifications on metal fatigue, the Staff recognizes that Dr. Hopenfeld has presented testimony on this topic in the *Vermont* 

Yankee license renewal proceeding, and the Staff took a position that Dr. Hopenfeld was qualified to present testimony on metal fatigue, but his testimony should be afforded less weight because, by his own admission, he was not an expert in stress analysis. Accordingly, in the event the Board does not strike the statements for the reasons stated in Entergy's Motion at 8-13, the Board should give little weight to Dr. Hopenfeld's statement on metal fatigue.

## **CONCLUSION**

For the foregoing reasons, the Staff supports Entergy's Motion *In Limine* to Exclude Portions of Pre-Filed Direct Testimony, Expert Report, Exhibits, and Statement of Position For Contention Riverkeeper TC-2 (Flow-Accelerated Corrosion) to the extent set forth in that Motion.

Respectfully submitted,

# /Signed (electronically) by/

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Dated at Rockville, Maryland this 9th day of February 2012

this 9th day of February 201

<sup>&</sup>lt;sup>10</sup> See Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), NRC Staff's Proposed Findings of Fact and Conclusions of Law, and Order in the Form of an Initial Decision at 22 (citing Vermont Yankee tr. at 832-833) (ADAMS Accession No. ML082401825). The Board in Vermont Yankee found Dr. Hopenfeld to be qualified. Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station) LBP-08-25, 68 NRC 763, 795 (2008), rev'd on other grounds and remanded CLI-10-17, 72 NRC 1 (2010). Notably, the Board in Vermont Yankee, having had the benefit of a hearing where Dr. Hopenfeld provided testimony which included his own CUFen recalculations, held "that Dr. Hopenfeld's CUFen recalculations are unsound." Vermont Yankee, LBP-08-25, 68 NRC at 823.

#### **CERTIFICATION OF COUNSEL**

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 he has participated in discussions between the movant and the Intervenors concerning this matter, and has made a sincere effort to make himself available to listen and respond to the moving party and the Intervenors, and to resolve the factual and legal issues raised in the motion, and that his efforts to resolve the issues have been unsuccessful.

Respectfully submitted,

### /Signed (electronically) by/

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Dated at Rockville, Maryland this 9th day of February 2012

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

| In the Matter of                                | )           |                           |
|---|-------------|---------------------------|
| ENTERGY NUCLEAR OPERATIONS, I                   | NC. )       | Docket Nos. 50-247/286-LR |
| (Indian Point Nuclear Generating Units 2 and 3) | )<br>)<br>) |                           |

#### CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing 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 RIVERKEEPER TC-2 (FLOW-ACCELERATED CORROSION), have been served upon the following persons by Electronic Information Exchange this 9th day of February, 2012:

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