

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
FIRSTENERGY NUCLEAR OPERATING CO.) Docket No. 50-346-LRA
)
(Davis-Besse Nuclear Power Station, Unit 1))
)

NRC STAFF'S ANSWER TO MOTION TO ADMIT NEW CONTENTION REGARDING
THE SAFETY IMPLICATIONS OF NEWLY DISCOVERED SHIELD BUILDING CRACKING

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1) and the Atomic Safety and Licensing Board's ("Board") Initial Scheduling Order ("ISO"),¹ the Staff of the U.S. Nuclear Regulatory Commission ("Staff") hereby files its answer to the "Motion for Admission of Contention No. 5 on Shield Building Cracking," jointly filed by Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the Green Party of Ohio (collectively "Intervenors")² regarding FirstEnergy Nuclear Operating Company's ("FENOC") license renewal application for Davis-Besse Nuclear Power Station, Unit 1 ("Davis-Besse").³

As more fully set forth below, the Staff has no objection to admission of a limited portion of the proposed Contention 5. The Staff would propose that the contention be refined as follows:

¹ Initial Scheduling Order at B.2.

² See Motion for Admission of Contention No. 5 on Shield Building Cracking ("Intervenors' Motion")(Jan. 10, 2012) (Agencywide Documents Access and Management System ("ADAMS") Accession No. ML12010A172).

³ Letter from Barry S. Allen, Vice President, dated August 27, 2010, transmitting the license renewal application for Davis-Besse (ADAMS Accession No. ML102450565) ("LRA").

Is the Structures AMP adequate to address any aging effects for the shield building that are related to the cracks identified by FENOC during the October 10, 2011 reactor head replacement and subject to a root cause evaluation to be provided by FENOC on February 28, 2012 such that the shield building would be unable to perform its intended functions of: 1) protecting the steel containment from environmental effects, including wind, tornado, and external missiles, 2) providing biological shielding, 3) providing controlled release to the annulus during an accident, and 4) providing a means for collection and filtration of fission product leakage from the Containment Vessel following a hypothetical accident?

However, the Staff opposes the admission of the portions of Contention 5 and Intervenors' asserted bases that raise issues that are outside the scope of this proceeding including: (1) challenges to Category 1 issues and generic Commission determinations, (2) assertions that the December 2, 2011 restart of Davis-Besse was unsafe given the cracks in the shield building, (3) assertions that the recently discovered cracks in the shield building constitute a safety issue during the current operating period, and (4) arguments that there is a "safety culture" issue at Davis-Besse. These portions of Contention 5 are also inadmissible because they are immaterial, fail to raise a genuine dispute with the application, and/or lack an adequate basis. Intervenors' claims that the analyses in the Environmental Report ("ER") and Staff's unpublished draft Supplemental Environmental Impact Statement ("DSEIS") are inadequate are also inadmissible because they lack an adequate basis and fail to raise a genuine material dispute. Accordingly, Intervenors' motion for admission of Contention 5 on recently discovered shield building cracking should be granted in part as refined and denied in part.

BACKGROUND

This proceeding concerns FENOC's August 27, 2010 application to renew its operating license for Davis-Besse for an additional twenty years from the current expiration date of April 22, 2017.⁴ The Staff accepted the LRA for review, and published a *Federal Register* Notice on

⁴ LRA at 1.2-1. If the LRA is approved, Davis-Besse's new license expiration date would be April 22, 2037.

October 25, 2010, providing a Notice of Opportunity for Hearing.⁵ On December 27, 2010, Joint Petitioners filed a petition to intervene.⁶ On April 26, 2011, the Board admitted in part two of four originally proffered contentions.⁷

On October 10, 2011, while performing a scheduled reactor head replacement, a needed construction opening was made in the Davis-Besse concrete shield building. During hydro-demolition of the concrete shield building, cracks were identified in the “architectural shoulders” of the shield building.⁸ Further investigation identified additional cracks in the shield building, including cracking that “could affect the structural integrity of the shield building and may impact its ability to perform its intended function during the period of extended operation.”⁹ The NRC authorized restart of the reactor on December 2, 2011, after independent NRC evaluations, analyses, and inspections confirmed that the shield building was able to perform its intended safety functions.¹⁰ On January 10, 2012, Intervenor filed a motion to admit Contention 5 based on the newly-discovered cracks in the shield building.¹¹

⁵ Notice of Acceptance for Docketing of the Application, Notice of Opportunity for Hearing for Facility Operating License No. NPF-003 for an Additional 20-Year Period; FirstEnergy Nuclear Operating Company, Davis-Besse Nuclear Power Station, Unit 1, 75 Fed. Reg. 65,528 (Oct. 25, 2010).

⁶ Beyond Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the Green Party of Ohio Request for Public Hearing and Petition for Leave to Intervene (Dec. 27, 2010).

⁷ *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-13, 73 NRC __ (Apr. 26, 2011) (slip op.). The Intervenor also filed several motions following the March 11, 2011 accident at the Fukushima Dai-ichi site in Japan, which are not discussed in this pleading. See, e.g., Emergency Petition To Suspend All Pending Reactor Licensing Decisions And Related Rulemaking Decisions Pending Investigation Of Lessons Learned From Fukushima Daiichi Nuclear Power Station Accident (Apr. 14, 2011) (ADAMS Accession No. ML111040355). See *Union Electric Co. d/b/a Ameren Missouri* (Callaway Plant, Unit 2) *et al.*, CLI-11-05, 74 NRC __ (Sept. 9, 2011)(slip op. at 3)(ADAMS Accession No. ML11252A535) (denying request to stay licensing decisions).

⁸ See <http://www.nrc.gov/info-finder/reactor/davi/davis-besse-shield-building-ga.pdf>. See also NRC RAI B.2.39-13 (ADAMS Accession No. ML11333A396)

⁹ NRC RAI B.2.39-13.

¹⁰ CAL No. 3-11-001, Confirmatory Action Letter – Davis-Besse Nuclear Power Station (Dec. 2, 2011), available at <http://pbadupws.nrc.gov/docs/ML1133/ML11336A355.pdf>.

¹¹ Intervenor's Motion.

DISCUSSION

I. Legal Requirements for Contentions

A. General Requirements for Admissibility

The legal requirements governing the admissibility of contentions are well-established and set forth in 10 C.F.R. § 2.309(f) of the Commission's regulations. Because the Staff's answer to the Petition to Intervene extensively discussed the contention admissibility standards, the Staff will not repeat them here.¹²

B. Timeliness of New or Amended Contentions

Intervenors who file late must satisfy not only the Commission's requirements to demonstrate standing (10 C.F.R. § 2.309(d))¹³ and submit at least one admissible contention (10 C.F.R. § 2.309(f)(1)), but also the Commission's stringent requirements for late-filed contentions (10 C.F.R. § 2.309(f)(2)) or untimely filings (10 C.F.R. § 2.309(c)). Under 10 C.F.R. § 2.309(f)(2), an amended contention filed after the initial filing period may be admitted as a timely new contention only with leave of the Board upon a showing that:

- (i) The information upon which the amended or new contention is based was not previously available;
- (ii) The information upon which the amended or new contention is based is materially different than information previously available; and
- (iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.¹⁴

A contention that does not qualify as a timely new contention under 10 C.F.R. § 2.309(f)(2) may be admissible under the provision governing nontimely contentions, 10 C.F.R.

¹² See "NRC Staff's Answer to Joint Petitioners' Request for a Hearing and Petition for Leave to Intervene," at 7-11 (Jan. 21, 2011) (ADAMS Accession No. ML110210999).

¹³ Intervenors were accorded representational standing by the Board in *Davis-Besse*, LBP-11-13, 73 NRC __ (slip op. at 30).

¹⁴ 10 C.F.R. § 2.309(f)(2).

§ 2.309(c). Nontimely filings may only be entertained following a determination by the Board that a balancing of the eight factors in 10 C.F.R. § 2.309(c) weigh in favor of admission.¹⁵ Of all the eight factors, the first, good cause for failure to file on time, is given the most weight.¹⁶

Pursuant to the Board's ISO, "a motion and proposed new contention shall be deemed timely under 10 C.F.R. § 2.309(f)(2)(iii) if it is filed within sixty (60) days of the date when the material information on which it is based first becomes available to the moving party through service, publication, or any other means. If filed thereafter, the motion and proposed contention shall be deemed nontimely under 10 C.F.R. § 2.309(c)."¹⁷ The Board emphasized that if there was uncertainty in whether a new or amended contention was timely filed, the movant could file under both § 2.309(f)(2) and § 2.309(c).¹⁸

¹⁵ The eight factors listed at § 2.309(c)(1) are as follows:

- (i) Good cause, if any, for the failure to file on time;
- (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding;
- (iv) The possible effect of any order that may be entered in the proceeding on the requestor's/petitioner's interest;
- (v) The availability of other means whereby the requestor's/petitioner's interest will be protected;
- (vi) The extent to which the requestor's/petitioner's interests will be represented by existing parties;
- (vii) The extent to which the requestor's/petitioner's participation will broaden the issues or delay the proceeding; and
- (viii) The extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record.

¹⁶ *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 261 (2009).

¹⁷ ISO at B.1.

¹⁸ *Id.*

C. Scope of License Renewal Proceedings

The Commission's regulations in 10 C.F.R. Part 54¹⁹ limit the scope of a license renewal proceeding to the specific matters that must be considered for the license renewal application to be granted. The Commission's standards for issuing a renewed license are set forth in 10 C.F.R. § 54.29. These standards, along with other regulations in 10 C.F.R. Part 54, and the environmental regulations related to license renewal set forth in 10 C.F.R. Part 51 and Appendix B thereto, establish the scope of issues that may be considered in a license renewal proceeding. The failure of a proposed contention to demonstrate that an issue is within the scope of the proceeding is grounds for its dismissal. 10 C.F.R. § 2.309(f)(1)(iii); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 567 (2005).

The Commission has provided guidance for license renewal adjudications regarding which safety and environmental issues properly fall within or beyond its license renewal requirements. See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3, 6-7 (2001). Specifically, the NRC conducts a technical review pursuant to 10 C.F.R. Part 54, to assure that pertinent public health and safety requirements have been satisfied. *Id.* at 6. In addition, the NRC performs an environmental review pursuant to 10 C.F.R. Part 51 to assess the potential impacts of twenty additional years of operation. *Id.* at 6-7.

Importantly, regardless of whether a license renewal application has been filed for a facility, the Commission has a continuing responsibility to oversee the safety and security of ongoing plant operations, and it routinely oversees a broad range of operating issues under its statutory responsibility to assure the protection of public health and safety for operations under

¹⁹ See generally, Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943 (Dec. 13, 1991); Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461 (May 8, 1995).

existing operating licenses. Therefore, for license renewal, the Commission has found it unnecessary to include a review of issues already monitored and reviewed as part of ongoing regulatory oversight processes. *Id.* at 8-10.

The Commission clearly indicated that its license renewal safety review focuses on “plant systems, structures, and components for which current [regulatory] activities and requirements *may* not be sufficient to manage the effects of aging in the period of extended operation.” *Id.* at 10 (*quoting* 60 Fed. Reg. at 22,469). Further, the Commission stated that: “Adjudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review; for our hearing process (like our Staff’s review) necessarily examines only the [safety] questions our safety rules make pertinent.” *Id.* at 10.

Contentions raising environmental issues in a license renewal proceeding are similarly limited to those issues which are affected by license renewal and have not been addressed by rulemaking or on a generic basis. *Turkey Point*, CLI-01-17, 54 NRC at 11-12. In 10 C.F.R. Part 51, the Commission divided the environmental requirements for license renewal into generic and plant-specific components. *Id.* at 11. The Generic Environmental Impact Statement (“GEIS”) contains “Category 1” issues for which the NRC has reached generic conclusions.²⁰ *Id.* Applicants for license renewal do not need to submit analyses of Category 1 issues in their Environmental Reports, but instead may reference and adopt the generic findings. *Id.* Applicants, however, must provide a plant-specific review of the non-generic “Category 2” issues. *Id.* Category 1 issues “are not subject to site-specific review and thus fall beyond the scope of individual license renewal proceedings.” *Id.* at 12;²¹ *see* 10 C.F.R. § 51.53(c)(3)(i)-(ii).

²⁰ NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants,” Final Report, (May 1996) (ADAMS Accession No. ML040690705).

²¹ In *Turkey Point*, the Commission recognized that “even generic findings sometimes need revisiting in particular contexts. . . . In the hearing process, for example, petitioners with new information

The Commission recently reiterated this principle, and specified that the GEIS Category 1 conclusions, which are expressly incorporated into part 51 regulations, generally may not be challenged in a license renewal proceeding unless the rule is waived by the Commission for a particular proceeding or the rule itself is suspended or altered in a rulemaking proceeding. *Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 17 (footnotes omitted), *reconsid. denied*, CLI-07-13, 65 NRC 211, 214 (2007).

II. Admissibility of Intervenor's Proposed Contention 5

Intervenor's Proposed Contention 5 states:

Intervenor contends that FirstEnergy's recently-discovered, extensive cracking of unknown origin in the Davis-Besse shield building/secondary reactor radiological containment structure is an aging-related feature of the plant, the condition of which precludes safe operation of the atomic reactor beyond 2017 for any period of time, let alone the proposed 20-year license period.²²

In support of Contention 5, Intervenor asserts that "[t]he shield structure is a feature requiring aging-management review [and] the cracking problem must be addressed as part of the license extension determination."²³ Intervenor also argues that "[i]mplications of the shield building's cracking phenomena must be analyzed within the supplemental environmental impact statement."²⁴ Thus, Proposed Contention 5 appears to be intended as both a safety contention and an environmental contention. As discussed in detail below, while the Staff agrees that a small portion of Intervenor's Proposed Contention 5 raises an admissible safety contention, it

showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule." *Turkey Point*, CLI-01-17, 54 NRC at 12.

²² Intervenor's Motion at 11. The contention is titled "Contention 5: Cracked Shield Building/Secondary Reactor Radiological Containment Structure." *Id.* at 10.

²³ *Id.* at 2. See also *id.* (asserting that "cracking should be considered as an aging feature at Davis-Besse, which requires explicit plans for remediation and management").

²⁴ Intervenor's Motion at 3. See also *id.* at 10 ("The cracking and cracking-related phenomena raise valid aging-management and EPA issues within the scope of this proceeding...").

fails to raise an admissible environmental contention. As such, the Staff proposes that the contention be refined to clearly establish the scope of the contention as follows:

Is the Structures AMP adequate to address any aging effects for the shield building that are related to the cracks identified by FENOC during the October 10, 2011 reactor head replacement and subject to a root cause evaluation to be provided by FENOC on February 28, 2012 such that the shield building would be unable to perform its intended functions of: 1) protecting the steel containment from environmental effects, including wind, tornado, and external missiles, 2) providing biological shielding, 3) providing controlled release to the annulus during an accident, and 4) providing a means for collection and filtration of fission product leakage from the Containment Vessel following a hypothetical accident?

Importantly, most of Intervenors' assertions, bases, and arguments are simply beyond the scope of this narrow license renewal proceeding, including (1) challenges to the generic determinations in Table B-1 of Appendix B to Part 51 that the environmental consequences of design basis and severe accidents are small without requesting a waiver of those regulations in this proceeding and (2) claims raising current operating issues. Moreover, Intervenors' claims that the analyses in the ER and Staff's unpublished DSEIS are inadequate, lack an adequate basis, and fail to raise a genuine material dispute. These portions of Contention 5 are inadmissible and the Board should narrow the scope of the proposed contention accordingly.

A. Contention 5 is Not Timely Filed But For Purposes of a Refined Safety Contention, Intervenors Meet the Non-Timely Filing Factors Despite Failing to Plead Them

In order to admit their new contention under 10 C.F.R. § 2.309(f)(2), Intervenors must show that the information upon which Contention 5 is based was not previously available, that such information is materially different than information previously available, and that they submitted the contention in a timely fashion based on the availability of the information. Pursuant to the Board's initial scheduling order, a new contention is deemed timely under 10 C.F.R. § 2.309(f)(2)(iii) if it is filed within sixty days of the date when the information on which it is based first becomes available to the moving party through service, publication, or any other

means.²⁵ The Commission has repeatedly stressed that intervenors have an “iron-clad obligation to examine the publicly available documentary material ... with sufficient care to enable [them] to uncover any information that could serve as the foundation for a specific contention.” *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC __ (Sept. 30, 2010) (slip op. at 18).

In this case, Intervenors only assert that Contention 5 is timely filed, and do not address the non-timely filing standards in 10 C.F.R. § 2.309(c).²⁶ Intervenors argue that Contention 5 is “based on structural damage – cracks – which were noticed by FENOC’s contractors or employees in September 2011 and soon reported to the NRC.”²⁷ Intervenors complain that FENOC described the cracks to be “superficial, cosmetic, [and] non-structural.”²⁸ Intervenors assert they only discovered that the cracks were not confined to the architecturally “decorative” elements of the building on January 5, 2012.²⁹

But, Intervenors’ Motion contradicts their claim of ignorance of the structural elements until January 5, 2012. At numerous points in their Motion, Intervenors point this Board to material information disclosed prior to January 5, 2012. For example, Intervenors cite to a letter

²⁵ ISO at B.1. “If filed thereafter, the motion and proposed contention shall be deemed nontimely under 10 C.F.R. § 2.309(c).” *Id.*

²⁶ Intervenors’ Motion at 8. See discussion of § 2.309 *infra*. The Staff notes that Intervenors’ discussion of a “reasonableness standard” for the timely filing of new contentions does not apply in this proceeding because the Board’s scheduling order specifies a 60-day deadline for filing new or amended contentions.

²⁷ Intervenors’ Motion at 8. The Staff notes that the cracks were actually noticed on October 10, 2011. See, e.g., CAL No. 3-11-001.

²⁸ Intervenors’ Motion at 19. See also *id.* at 24 (“FirstEnergy said they were ‘hairline’ cracks, ‘barely visible’ in an ‘architectural’ or ‘decorative’ section of the concrete.”).

²⁹ *Id.* at 8. Intervenors argue that they are raising Contention 5 now to avoid “the procedural peril of sitting-and-waiting while in possession of information that should be included and analyzed in the NEPA document in this proceeding.” *Id.* at 9 (noting that the ER does not include any discussion of the recently discovered shield building cracking); *id.* at 8 (noting that the Staff’s DSEIS has not been published). As discussed below, the Intervenors’ claims regarding the ER and the DSEIS are inadmissible.

FENOC sent to investors on October 31, 2011 which stated that there were additional cracks in structural parts of the concrete shield building.³⁰ Notably, Intervenor's Motion states that this letter to investors indicated to Intervenor that the cracking was more extensive and structural.³¹ Intervenor also reference a November 1, 2011 *Toledo Blade* article discussing this letter to investors.³² Additionally, Intervenor cite to a November 20, 2011 *Toledo Blade* article which states that "[t]he areas where most of the cracks have appeared have structural significance, and are not merely 'architectural elements.'"³³ The Intervenor also discuss additional information about the extent and significance of the cracking which was made publicly available well before the January 5, 2012 public meeting. For example, Intervenor discuss information relayed during a December 6, 2011 meeting with Congressman Kucinich and his staff.³⁴

In addition to these internally inconsistent statements by Intervenor, other articles have been published detailing the structural cracks in the shield building.³⁵ The Staff also disclosed documents related to Davis-Besse's shield building including incoming Congressional correspondence.³⁶ As such, Intervenor had an iron-clad obligation to examine the full public

³⁰ Intervenor's Motion at 17.

³¹ See *id.* at 19 ("Hence the early assurances by FENOC and NRC spokespeople, implying that the cracking was superficial, cosmetic, non-structural, etc. have been admitted to be false by FENOC itself in a letter to its own shareholders.").

³² *Id.* at 18-19.

³³ *Id.* at 24. Further, Intervenor extensively reference a November 21, 2011 letter from Congressman Kucinich to Chairman Jaczko, outlining concerns about the recently identified shield building cracking. *Id.* at 26-29. See Intervenor's Motion at 32, 33, and 36.

³⁴ See *id.* at 33 (citing statement on Congressman Kucinich's webpage which notes that "The areas where most of the cracks have been discovered do have structural significance.").

³⁵ See, e.g., "FirstEnergy Finds More Cracks at Davis-Besse Nuclear Power Plant," *Bloomberg Businessweek*, Oct. 31, 2011, available at <http://www.bloomberg.com/news/2011-10-31/firstenergy-finds-more-cracks-at-davis-besse-nuclear-power-plant.html>.

³⁶ See, e.g., Letter from Congressman E. Markey, to G. Jazcko, Chairman, NRC (Oct. 14, 2011) (ADAMS Accession No. ML11292A005).

record and the documents identified in the Staff's disclosures. Based on articles published and the Staff's disclosures, it is clear that structural cracks in the shield building were disclosed at least as early as November 1, 2011,³⁷ and that Intervenors recognized the cracks were more extensive and structural at this time.³⁸ Thus, Intervenors should have filed Contention 5 no later than 60 days after November 1, 2011, or December 30, 2011. In fact, the Staff's December 27, 2011 Request for Additional Information ("RAI"), which Intervenors claim mirror their own concerns,³⁹ demonstrates that Intervenors could have assembled a contention by December 30, 2011. As the Commission has made clear, intervenors cannot "delay filing a contention until a document becomes available that collects, summarizes and places into context the facts supporting that contention." *Prairie Island*, CLI-10-27, 72 NRC __ (Sept. 30, 2010) (slip op. at 17).

Instead, Intervenors waited until January 10, 2012, to file their contention and did not specify how information they were aware of more than 60 days before Contention 5 was filed is materially different from information that was made publicly available within 60 days of filing Contention 5, as required by the Board's ISO. Intervenors also waited until January 5, 2012, to ask FENOC and Staff if they would oppose their new contention.⁴⁰ Intervenors could and should have contacted the parties or moved the Board for an extension of time to file their

³⁷ See e.g., FENOC's October 31, 2011 public disclosure to investors, the Staff's hearing file disclosures on November 1, 2011, and Nov. 1, 2011 *Toledo Blade* article.

³⁸ See Intervenors' Motion at 19 ("Hence the early assurances by FENOC and NRC spokespeople, implying that the cracking was superficial, cosmetic, non-structural, etc. have been admitted to be false by FENOC itself in a letter to its own shareholders.").

³⁹ *Id.* at 55.

⁴⁰ See Email from Terry Lodge to Alex Polonsky and Brian Harris, "RE Davis-Besse, Docket No. 50-346 (proposed new contention filing)," (Jan. 5, 2012). Attached as Appendix A.

contention.⁴¹ Instead, Intervenors remained silent until after their time to file had passed. As such, Intervenors are untimely under 10 C.F.R. § 2.309(f)(2).

Further, Intervenors do not address the non-timely standards in 10 C.F.R. § 2.309(c), even though it is uncertain when the Intervenors actually became aware of the structural cracks.⁴² A failure to plead § 2.309(c) is in and of itself grounds for dismissal.⁴³ Despite these procedural flaws, the Staff finds that Intervenors' Motion demonstrates good cause, as well as meets the other § 2.309(c) factors. Intervenors accurately note that there have been "fast emerging developments following discovery of cracking in the reactor shield building at Davis-Besse," Intervenors' Motion at 6, including the recent identification of cracking around the top 20 feet of the building and assumptions that the cracks extend the full 225-foot height of the reactor shield building.⁴⁴ The Staff also recognizes that the filing was only 10 days late, and that the 60-day period included several holidays. Thus, there is good cause for Intervenors' late filing of Contention 5.

Intervenors' Motion also meets the remaining § 2.309(c) factors. The Intervenors are already a party to the proceeding, and therefore have a significant interest in the proceeding. Intervenors' participation will not broaden the issues or delay the proceeding, as their concerns mirror the concerns outlined in Staff's December 27, 2011 RAIs and SER open item. Further, any order entered in the proceeding would affect the Intervenors' interests, and there are no

⁴¹ Had Intervenors approached the parties or moved the Board for an extension of time, they could have alleviated any concern over when they should have filed. In fact, they could have asked for the Board to set a date after FENOC provided its root cause analysis.

⁴² See ISO at B.1 (noting that Intervenors could file under both § 2.309(f)(2) and § 2.309(c) if there was uncertainty about whether a new or amended contention was timely).

⁴³ See *Amergen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260-61 (2009) ("Section 2.309(c)(2) clearly provides that a petitioner 'shall address' all eight factors set forth in section 2.309(c)(1). ... [F]ailure to comply with our pleading requirements for late filings constitutes sufficient grounds for rejecting ... intervention and hearing requests.").

⁴⁴ Intervenors' Motion at 8, 33, 36, 37.

other parties to the proceeding. Finally, given the early stage of this proceeding, the Intervenor have time to obtain expert(s) to assist in developing a sound record on this issue. Thus, Intervenor have met the § 2.309(c) factors despite their failure to plead them.

B. Contention 5 In Part Constitutes an Admissible Contention

Intervenor assert that Contention 5 satisfies the admissibility criteria of 10 C.F.R. § 2.309(f)(1).⁴⁵ As discussed below, the Staff agrees that a small portion of Proposed Contention 5 satisfies the admissibility criteria of 10 C.F.R. § 2.309(f)(1).

Intervenor argue that the Applicant's Structures AMP is inadequate to manage the effects of aging related to the recently-identified shield building cracks. Intervenor state that the shield building "is safety-significant and vulnerable to age-related degradation...during extended operations from 2017-2037. Thus it is subject matter worthy of a hearing."⁴⁶

Intervenor's base their assertions on articles in the *Toledo Blade*, statements by Congressman Kucinich, and the Staff's December 27, 2011 RAI B.2.39-13.⁴⁷ In that RAI, the Staff stated that:

Extensive cracking in the shield building could affect the structural integrity of the shield building and may impact its ability to perform its intended function during the period of extended operation.

The Staff requested the applicant to summarize the shield building degradation, the root cause, and the expected corrective actions.⁴⁸ The Staff also asked the Applicant to provide information on "how the recent plant-specific operating experience impacts the Shield Building's ability to

⁴⁵ Intervenor's Motion at 9, 10.

⁴⁶ Intervenor's Motion at 38.

⁴⁷ See *id.* at 23 (asserting that Staff's December 27, 2011 RAI extends "directly to aging management vis-à-vis cracking in the concrete shield building."). The Staff recognizes that there is Commission precedent stating that petitioners must do more than rest on the mere existence of RAIs as a basis for their contention. See, e.g., *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 336 (1999) (citing *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 350 (1998)). However, the Staff finds these cases distinguishable from the case at hand, as Intervenor have indicated how the RAIs evidence credible safety significance, and how the application is materially incomplete because of the RAI matters.

⁴⁸ Intervenor's Motion at 54 (quoting RAI).

perform its intended functions during the period of extended operation.”⁴⁹ Further, the Staff asked the applicant to explain “how the recent plant-specific operating experience will be incorporated into the Structures Monitoring Program AMP, and whether the current program will be adequate to manage aging of the shield building during the period of extended operation, based on this operating experience.”⁵⁰ Additionally, the Staff asked the Applicant to “[i]dentify and explain any changes to the [LRA] based on the recent plant specific experience.”⁵¹ Intervenor explain that these questions mirror their own, and are incorporated by reference in their proposed Contention 5.⁵²

Intervenor also base Contention 5 on the Staff’s December 27, 2011 RAI B.1.4-2. In that RAI, the Staff requested the Applicant to provide additional information on its “programmatic activities that will be used to continually identify aging issues, evaluate them, and as necessary, enhance the aging management programs (AMPs) or develop new AMPs for license renewal.”⁵³ Likewise, Intervenor point to Staff’s related RAI, B.1.4.3, as basis for their concerns.⁵⁴ That RAI requests the Applicant to “provide additional details in the USAR supplement on how the ongoing operating experience review activities address issues specific to aging.”⁵⁵

⁴⁹ Intervenor’s Motion at 54 (quoting RAI). NRC also requested “a list of any additional aging effects that may require management based on this operating experience.” *Id.*

⁵⁰ *Id.* Intervenor cite the remaining portions of the Staff’s RAI, which outline the Staff’s requests. See Intervenor’s Motion at 54-55 (listing items 3.(a)-(d)).

⁵¹ *Id.* at 55.

⁵² *Id.*

⁵³ *Id.* at 50 (quoting RAI). Intervenor cite the remaining portions of the Staff’s RAI, which outline the Staff’s requests. See *id.* at 50-52.

⁵⁴ See *id.* at 53 (“Certainly, if FENOC plans to use ‘ongoing operating experience review activities to address issues specific to aging,’ such as the problem of cracks in the shield building, then it must be considerably more forthcoming with detail.”).

⁵⁵ *Id.* at 53 (quoting RAI).

Intervenors also raise concerns about the Applicant's shield building visual inspection surveillance test procedure, Intervenors' Motion at 38-40, which is part of the Structures AMP. Specifically, Intervenors claim that the visual inspection program is not adequate to address the recently identified cracking in the shield building because (1) it is limited to external surfaces,⁵⁶ and the cracking at issue is "internal and not visible to the naked eye on the surface,"⁵⁷ (2) it lacks formal training requirements,⁵⁸ and (3) is not done frequently enough.⁵⁹ Further, "Intervenors seek to understand FENOC's specific methodology for visually inspecting [the top 20 feet of the concrete shield building]," given the recently identified cracks in that portion of the building.⁶⁰

To the extent Contention 5 identifies FENOC's failure to describe how the Structures AMP will account for the shield building cracks during the period of extended operation, Contention 5 is an admissible contention of omission.⁶¹ The Staff proposes the following language for Contention 5:

Is the Structures AMP adequate to address any aging effects for the shield building that are related to the cracks identified by FENOC during the October 10, 2011 reactor head replacement and subject to a root cause evaluation to be provided by FENOC on February 28, 2012 such that the shield building would be unable to perform its intended functions of: 1) protecting the steel containment from environmental effects, including wind, tornado, and external missiles, 2) providing biological shielding, 3) providing controlled release to the annulus during an accident, and 4) providing a means for collection and filtration of fission product leakage from the Containment Vessel following a hypothetical accident?

⁵⁶ The Staff notes that personnel perform general visual examinations of the *interior and exterior surfaces* of the shield building. (emphasis added). Intervenors' Motion at 38.

⁵⁷ *Id.* See *id.* at 39 (asserting that visual inspections are necessary but insufficient).

⁵⁸ The Staff notes that ACI requires specific training requirements.

⁵⁹ *Id.* at 38-40.

⁶⁰ *Id.* at 40.

⁶¹ However, Intervenors' attempts to raise generic concerns about issues the NRC Staff raised in May 2011 RAIs and related to cracking due to PWSCC of the SG tube-to-tubesheet welds are untimely. See *id.* at 53, 55.

C. The Remaining Portions of Contention 5 Raise Issues That Are Beyond the Scope of This Proceeding, Lack an Adequate Basis, Are Immaterial, and/or Fail to Raise a Genuine Dispute With the Application

The remaining portions of Contention 5 raise issues that are outside the scope of this proceeding, and thus must be rejected. *Millstone*, CLI-05-24, 62 NRC at 567. Specifically, Contention 5 impermissibly (1) challenges the generic determinations in Table B-1 of Appendix B to Part 51 that the environmental consequences of design basis and severe accidents are small without requesting a waiver of those regulations in this proceeding and (2) raises current operating issues. Consequently, these portions of Contention 5 are inadmissible. Moreover, even if these claims were within the scope of the proceeding, they are immaterial, fail to raise a genuine dispute with the application and/or lack an adequate basis. Intervenors' claims about the inadequacy of the ER and DSEIS are also inadmissible as they are unsupported and fail to raise a genuine material dispute.

1. Contention 5 is Beyond the Scope of the Proceeding to the Extent it Challenges the Commission's Generic Determinations in Table B-1 on the Environmental Impacts of Design Basis and Severe Accidents

Intervenors' Contention 5 explicitly attacks the Commission's generic determinations in 10 C.F.R Part 51 Appendix A, Table B-1 ("Table B-1"), that the environmental impacts of design basis accidents and the probability-weighted consequences of severe accidents are small.

Specifically, Intervenors assert that:

Despite the "small" significance assigned to Category 1 "Postulated Accidents" at 10 C.F.R. Part 51, Subpart A, Appendix B, Intervenors contend that the rather unique cracking phenomenon at Davis-Besse suggests that this generic finding is inapplicable in this instance. Similarly, the potential for severe accidents might be implicated were the cracking to be accepted without any repair or other mitigation, such as replacement of the entire shield building. According to NRC interpretation, the analysis in the [GEIS] for Category 2 "Severe Accidents" "has shown that one or more of the criteria of Category 1 cannot be met, and therefore additional plant-specific review is required.

Intervenors' Motion at 6. The Commission has limited contentions raising environmental issues in license renewal proceedings to those issues that are affected by license renewal and have not been addressed by rulemaking or on a generic basis. *Turkey Point*, CLI-01-17, 54 NRC at

11, 16. While “severe accident mitigation alternatives” is a Category 2 issue, i.e., requires site-specific review, the Commission has made a generic determination that environmental impacts for both design basis and severe accidents are small for all plants. See Table B-1 at 65. Thus, these generic findings, codified in NRC regulations, are not subject to challenge absent a waiver of their application in a particular adjudicatory proceeding. See 10 C.F.R. § 2.335(a); *Turkey Point*, CLI-01-17, 54 NRC at 11, 16; *Davis-Besse*, LBP-11-13, 73 NRC __ (slip op. at 35).

Intervenors have not requested such a waiver.

Importantly, a claim of new and significant information is not enough to bring generic Commission determinations within the scope of a license renewal proceeding. *Vermont Yankee*, CLI-07-03, 65 NRC 13, 21 (2007) *aff'd*, *Massachusetts v. NRC*, 522 F.3d at 120-21, 125-27 (1st Cir. 2008).⁶² “Adjudicating Category 1⁶³ issues site-by-site based merely on a claim of new and significant information ... would defeat the purpose of resolving generic issues in a GEIS.” *Id.* Instead, a waiver must be submitted and granted. *Id.* at 16. Intervenors appear to recognize that a waiver must be sought when challenging generic determinations in Table B-1,⁶⁴ but have not sought a waiver or discussed in their motion how their claims would meet the NRC’s stringent waiver standards. See *Millstone*, CLI-05-24, 62 NRC at 559-60 (citations omitted). Therefore, this portion of Contention 5 is inadmissible.

⁶² The Commission recognizes its duty to evaluate whether there is any new and significant information regarding its severe accident determinations and supplements its NEPA documentation accordingly. See 10 C.F.R. § 51.95(c)(3); *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Unit 2), CLI-10-29, 72 NRC__ (Nov. 30, 2010) (slip op. at 10) (ADAMS Accession No. ML103340280) (*citing Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 373-74 (1989)). In *Watts Bar*, the Commission noted that even when a regulation in Part 51 excuses the agency from considering the issue in a given proceeding, NEPA requires the NRC Staff to take a hard look at new and significant information related to the issue. *Id.*

⁶³ The Staff recognizes that severe accidents are a Category 2 issue for those plants that have not performed a site-specific SAMA analysis. But the Commission’s determination that the environmental impact of design basis and severe accidents is small for all plants is codified in Table B-1, and therefore cannot be challenged absent a waiver. See *Millstone*, CLI-05-24, 62 NRC at 559-60.

⁶⁴ See Intervenors’ Motion at 5 (quoting from *Vermont Yankee*’s holding that “In the hearing process, for example, petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek waiver of the rule.”).

2. Contention 5 is Beyond the Scope of the Proceeding to the Extent it Raises Issues Related to Davis-Besse's Current Operation

As discussed above, the scope of the license renewal safety review is narrow; it is limited to “plant structures and components that will require an aging management review for the period of extended operation and the plant’s systems, structures and components that are subject to an evaluation of time-limited aging analyses.” *Duke Energy Corp.*, (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-01-20, 54 NRC 211, 212 (2001). For each structure or component requiring an aging management review, a license renewal applicant must demonstrate that the “effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the [CLB] for the period of extended operation.” *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-456 (2010).

Challenges to the adequacy of a plant’s CLB, however, are beyond the scope of license renewal. *See Turkey Point*, CLI-01-17, 54 NRC at 8-9 (stating the Commission’s on-going regulatory oversight ensures the adequacy of the plant’s current licensing basis, thus there is no reason to reanalyze the adequacy of the CLB for license renewal). Thus, to the extent that Contention 5 seeks to challenge the adequacy of the Commission’s safety regulations and the adequacy of Davis-Besse’s CLB to provide reasonable assurance of adequate protection of public health and safety,⁶⁵ it is beyond the scope of this proceeding and must be rejected. Consequently, Intervenors’ claims regarding the December 2, 2011, restart, current operation of the plant, and Davis-Besse’s “safety culture” are outside the scope of this proceeding.

⁶⁵ The Atomic Energy Act of 1954 (“AEA”) requires the NRC to ensure the safe operation of nuclear power plants. *Union of Concerned Scientists v. NRC*, 824 F.2d 108, 109 (D.C. Cir. 1987). Under Section 182.a of the AEA, the Commission must ensure that “the utilization or production of special nuclear material will ... provide adequate protection to the health and safety of the public.” *Id.* (quoting 42 U.S.C. § 2232(a)) (alterations in original).

a. Challenges to the NRC's Decision to Allow Davis-Besse to Restart Are Outside the Scope of This Proceeding

Intervenors assert that the shield building cracks have safety significance and the NRC should not have allowed the plant to restart on December 2, 2011,⁶⁶ especially since the NRC's inspection report has not been issued and the root cause evaluation is not due until February 28, 2012.⁶⁷ Intervenors claim that the restart imperils them and "the people they represent, and countless residents downwind and downstream of the aged and aging Davis-Besse atomic reactor."⁶⁸

These issues are simply beyond the scope of a license renewal proceeding and represent challenges to the Staff's technical review of a safety issue, the current licensing basis, and FENOC's compliance with its license. See *Turkey Point*, CLI-01-17, 54 NRC at 8-10.⁶⁹ To the extent Intervenors believe there are existing operational issues at Davis-Besse that warrant immediate action, their remedy is to file a § 2.206 petition. See *Pacific Gas and Electric Co.*

⁶⁶ See, e.g., Intervenors' Motion at 23 ("Intervenors do not understand how FENOC and the NRC can claim that the cracks are not safety-significant."). See also *id.* at 44-45 (claiming it is inappropriate that certain information was not obtained prior to restart).

⁶⁷ *Id.* at 31, 49. Intervenors also make several requests for the release of documents related to the recently identified shield building cracking. See, e.g., *id.* at 31, 32, 42. The Staff notes that it has and will continue to meet its discovery obligations in this proceeding, pursuant to the Board's Scheduling Order.

⁶⁸ *Id.* at 23-24. Intervenors make several other assertions related to restart that are outside the scope of this proceeding. For example, Intervenors assert that the NRC's independent assessment and review of the shield building cracking issue thus far is "woefully inadequate," *id.* at 14, 16. Intervenors also argue that the NRC should have verified and overseen FENOC's root cause evaluation team prior to restart. *Id.* at 45-46. Further, Intervenors assert that the "design evaluation and analysis for the shield building did not properly consider the dead load from the 'non-structural, architectural concrete' attached to it," *id.* at 21, and that the "shield building was not sufficiently examined for indication of cracking." *Id.* at 21 (incorporating UCS' conditional allegations). Notably, the NRC answered several of the questions and concerns raised by these allegations, which were restart-related, in a publicly available communication dated Dec. 29, 2011. See <http://www.nrc.gov/info-finder/reactor/davi/davis-besse-shield-building-ga.pdf>, at 9-10.

⁶⁹ Intervenors' reference to the North Anna restart is also outside the scope of this license renewal proceeding. Intervenors' Motion at 57.

(Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC__ (Oct. 12, 2011) (slip op. at 13).⁷⁰

Even assuming Intervenors' restart claims were within the scope of the proceeding, these portions of Contention 5 would not meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1), as they lack an adequate basis,⁷¹ are immaterial,⁷² and fail to raise a genuine dispute with the application.⁷³

b. Claims That the Shield Building Cracks Are a Safety Issue During the Current Operating Period are Outside the Scope of the Proceeding

In addition to challenging the restart decision, Intervenors make multiple claims that the recently identified shield building cracks constitute a current safety issue. However, these claims raise current safety issues and are therefore outside the scope of the proceeding. *Turkey Point*, CLI-01-17, 54 NRC at 8-10.⁷⁴ As discussed above, the Commission has a continuing

⁷⁰ See Intervenors' Motion at 57 (noting that Beyond Nuclear filed § 2.206 petition on North Anna restart).

⁷¹ Intervenors repeatedly claim that the restart was premature and unsafe because FENOC and NRC did not have a "full understanding of the causes, extent, and significance of the cracking." See, e.g., *id.* at 31. As support for these claims, Intervenors reference conditional allegations submitted by the Union of Concerned Scientists related to a § 2.206 petition, *Toledo Blade* articles, and comments from Congressman Kucinich. However, Intervenors provide no supporting reasons, facts or expert opinion for concluding that the restart authorization was premature or unsafe. The Commission has clearly stated that "bare assertions and speculation [are] not enough to trigger an adversary hearing...". *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000).

⁷² To renew a license, the Commission must find "reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB." 10 C.F.R. § 54.29. Intervenors fail to indicate how the December 2, 2011 restart of Davis-Besse impacts the Staff's ability to make a reasonable assurance determination pursuant to § 54.29.

⁷³ First, Intervenors do not include references to specific portions of the application, ER, or safety report that they dispute or give supporting reasons for any dispute. Intervenors also do not suggest that the application fails to contain relevant information regarding the December 2, 2011 restart. In fact, Intervenors' only reference to the application is a general reference to the ER's SAMA, reliability, and alternatives analyses. See Intervenors' Motion at 26. Second, Intervenors' claims regarding restart focus on the "woeful" inadequacy of the restart analyses and investigations. *Id.* at 14, 16. But the restart analyses are not incorporated into or relied on by the LRA or ER.

⁷⁴ See, e.g., 10 C.F.R. § 54.30(a) and (b) (noting that if license renewal review of a plant demonstrates that plant will not comply with its CLB during the current licensing term, the licensee must take actions to address the noncompliance, and the licensee's compliance with this requirement is not within the scope of the license renewal review).

responsibility to oversee the safety and security of ongoing plant operations, and it routinely oversees a broad range of operating issues under its statutory responsibility to assure the protection of public health and safety for operations under existing operating licenses. Therefore, for license renewal, the Commission has found it unnecessary to include a review of issues already monitored and reviewed in the ongoing regulatory oversight processes. *Turkey Point*, CLI-01-17, 54 NRC at 8-10. Thus, the Intervenor's following claims are outside the scope of the proceeding.

First, Intervenor's argue that "the 'welds' on the inner steel container, and 'repours' of concrete on the outer shield/secondary containment building, are...weak spots,"⁷⁵ and that this is a "safety-significant issue" for current operation.⁷⁶ But, any claimed "weak spots" in the shield building would be addressed by the NRC in its ongoing oversight of the reactor.⁷⁷

Second, Intervenor's claim that the risks presented by the current cracks will only increase in the next few years, i.e., during the current license term.⁷⁸ Specifically, Intervenor's assert that the concrete could suffer from age-related degradation, which would mean that "Davis-Besse's shield building cracking will become more and more safety-significant *with each passing year*."⁷⁹ Intervenor's go so far as to suggest that the recently identified cracks could

⁷⁵ Intervenor's Motion at 21-22.

⁷⁶ Intervenor's Motion at 24.

⁷⁷ For example, any repairs to the shield building resulting from openings made for the replacement heads and the contemplated steam generator replacement must be done such that the shield building continues to meet its licensing basis.

⁷⁸ Intervenor's Motion at 11. *See also id.* at 25 (*quoting Toledo Blade* article's assertion that "It is likely that more concrete will crack during the remaining six years of the plant's operating license.").

⁷⁹ *Id.* at 25 (emphasis added). *See also id.* at 46 (Intervenor's "question with alarm the safety significance of the potential for worsening concrete shield building cracking over the next five years of licensed operations"); *id.* at 53 (suggesting that there is such rapid degradation of the shield building concrete that Davis-Besse cannot safely operate to the end of its existing license).

cause Davis-Besse to be shut down before its current license expires on April 22, 2017.⁸⁰

However, the NRC's ongoing oversight of the reactor would address any safety-significant issue arising during the current license period associated with the recently identified shield building cracking. See, e.g., 10 C.F.R. § 54.30(a) and (b).

Third, Intervenors argue there is a danger of "a single steam generator tube rupture causing a cascade of tube ruptures, which could lead to a Loss of Coolant Accident and melt down in the reactor core."⁸¹ Thus, Intervenors assert that a "once every five years inspection of all tubes is unacceptable."⁸² Further, Intervenors assert that NRC's RAIs on this issue raise "concern that FENOC is not on top of such safety significant aging management issues."⁸³ However, these issues will be addressed as part of NRC's ongoing oversight. Moreover, Intervenors do not indicate how concerns with inspections of steam generator tube-to-tubesheet welds relate to the recently identified cracks in the shield building.

Fourth, Intervenors argue that a steam generator replacement planned for 2014 will result in additional cracking such that the building will "not adequately perform its safety- and security-related functions."⁸⁴ Intervenors also claim that "if FENOC screws up this [AMP] badly enough, it could very well have to replace steam generators yet again in the future, during license extension, even after the 2014 steam generator replacement."⁸⁵ This assertion is flawed for several reasons. First, this claim is pure speculation and is not adequately supported.

⁸⁰ See *id.* at 26 (alleging that cracked shield building has potential to cause plant's early retirement, before its current license expiration in 2017); *id.* at 46-47 ("Intervenors contend that Davis-Besse should be shut down on Earth Day (April 22), 2017...*at the very latest*)(emphasis added).

⁸¹ Intervenors' Motion at 56.

⁸² Intervenors' Motion at 56.

⁸³ *Id.* at 56. The RAI concerns the "extent and method of the inspections to manage cracking due to primary water stress corrosion cracking (PWSCC) of the steam generator (SG) tube-to-tubesheet welds." *Id.* at 55-56.

⁸⁴ *Id.* at 11 (*citing* ER 3.2-1 – 3.2-4).

⁸⁵ *Id.* at 55.

Second, any repairs to the shield building resulting from any steam generator replacement must be done such that the shield building continues to meet its licensing basis. Third, a failure to subsequently implement an AMP is an enforcement issue, not an issue unique to license renewal.

Finally, Intervenors raise concerns about some recent seismic activity in Youngstown, Ohio, claiming that “[i]f the structural integrity of the shield building is in question ... then seismic activity in the area raises even more concerns.”⁸⁶ Intervenors also argue that the NRC “harbor[s] an apparent disregard of the need for seismic safety, even post-Fukushima.”⁸⁷ Intervenors’ claims are outside the scope of this proceeding, as they raise current operating issues.

First, there are not currently questions about the structural integrity of the shield building.⁸⁸ As discussed above, the NRC determined that the cracks, as they are, do not impact the structural integrity of the building. Second, the NRC does consider the need for seismic safety with respect to the site specific characteristics of each plant. In fact, the NRC’s regulations require that plants are robustly designed to withstand a Safe Shutdown Earthquake. *See, e.g.*, Part 100. Moreover, following the Fukushima Dai-ichi accident, the Commission established a Task Force to “conduct a methodical and systematic review of the NRC’s process and regulations to determine whether the agency should make additional improvements to its regulatory system and to make recommendations to the Commission for its policy direction.”⁸⁹

⁸⁶ Intervenors’ Motion at 57.

⁸⁷ *Id.* The Staff notes that this Board has rejected Intervenors’ Fukushima-related claims. *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-34, 74 NRC__ (Nov. 23, 2011) (slip op. at 2).

⁸⁸ *See* CAL No. 3-11-001.

⁸⁹ “Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident,” at 1 (July 12, 2011) (ADAMS Accession No. ML111861807).

Notably, the Commission recently approved the Staff's plan to implement the seismic-related recommendations from the Task Force's Report.⁹⁰ As discussed, the NRC's ongoing oversight of the plant will ensure licensee compliance with the plant's current licensing basis during the initial period of operation and the extended period of operation.⁹¹

To the extent Intervenor believe there are existing operational issues at Davis-Besse that warrant immediate action, their remedy is to file a § 2.206 petition.

c. "Safety Culture" Claims are Outside the Scope of the Proceeding

As support for Contention 5, Intervenor argue that Davis-Besse's operational history suggests that there is a "safety culture" issue at the plant.⁹² Specifically, Intervenor argue that "FirstEnergy has a long history at Davis-Besse of placing profit ahead of safety."⁹³ Intervenor discuss what they call the 2002 "Hole-in-the-Head fiasco" and claim that the cracking in the shield building is "another round of 'Radioactive Russian Roulette' at Davis-Besse."⁹⁴ Intervenor claim that "NRC and FENOC's *current actions* belie their verbal assurances [that "safety culture" has been strengthened], and hark back to the 'profit over safety' days of the Hole-in-the-Head debacle."⁹⁵ Intervenor argue that NRC's December 2, 2011 restart decision "is a repeat of FENOC putting profits ahead of safety, and NRC letting FENOC get away with

⁹⁰ See SRM – SECY-11-0124 – Recommended Actions To Be Taken Without Delay From The Near-Term Task Force Report (Oct. 18, 2011)(ADAMS Accession No. ML112911571) ("SRM-SECY-11-0124"); SRM-SECY-11-0137 – Prioritization of Recommended Actions to be Taken in Response to Fukushima Lessons Learned (Dec. 15, 2011) (ADAMS Accession No. ML113490058).

⁹¹ See 56 Fed. Reg. at 64,946; see also Turkey Point, CLI-01-17, 54 NRC at 10 (noting that issues which already are the focus of ongoing regulatory processes do not come within the NRC's safety review at the license renewal stage).

⁹² Intervenor's Motion at 17, 18.

⁹³ *Id.* at 28.

⁹⁴ *Id.* at 18. The Staff notes that the Board previously ordered claims regarding this stricken from Intervenor's contention filings. See Memorandum and Order (Granting Motion To Strike and Requiring Re-filing of Reply) at 2-4 (Feb. 18, 2011)(ADAMS Accession No. ML110490269). The Staff objects to any attempt by Intervenor to reintroduce subject matter previously stricken by this Board.

it.”⁹⁶ Additionally, Intervenor’s claim that it was inappropriate for NRC to trust FENOC to have deployed qualified personnel to examine the root cause of the cracking given previous issues with the plant.⁹⁷

Intervenor’s “safety culture” claims amount to a challenge that Davis-Besse is unsafe to operate currently and/or during the period of extended operation based on past operational experience. The Commission has found that such “safety culture” contentions are outside the scope of license renewal, as they impermissibly raise issues that are relevant to current plant operation and are being addressed by the NRC’s established and ongoing oversight activities. See *Prairie Island*, CLI-10-27, 72 NRC __ (slip op. at 2); see also *Diablo Canyon*, CLI-11-11, 74 NRC __ (slip op. at 9-13). Thus, these “safety culture” claims are inadmissible.

As the Commission has noted “license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to [our] ongoing compliance oversight activity.” *Prairie Island*, CLI-10-27, 72 NRC __ (slip op. at 10). The license renewal rule was developed to “exclude from review conceptual issues ‘such as operational history, quality assurance, quality control, management competence, and human factors,’ in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components.” *Diablo Canyon*, CLI-11-11, 74 NRC __ (slip op. at 10) (internal cites omitted, emphasis removed). The Commission has found that litigation of the “safety culture” contention in license renewal proceedings would necessitate just such an analysis of the conceptual issues that the Commission had clearly excluded from review. *Prairie Island*, CLI-10-27, 72 NRC __ (slip op. at 10-11). To the extent Intervenor’s believe there are existing

⁹⁵ Intervenor’s Motion at 18 (emphasis added).

⁹⁶ *Id.* at 46.

⁹⁷ *Id.* at 45-46.

operational issues at Davis-Besse that warrant immediate action, their remedy is to file a § 2.206 petition.

3. Even if Intervenors' Claims Regarding Current Operation Were Within the Scope of the Proceeding, They Lack an Adequate Basis, Are Immaterial, and Fail to Raise a Genuine Dispute With the Application

Even assuming Intervenors' claims about the current safety of Davis-Besse were within the scope of the proceeding, these portions of Contention 5 would not meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1), as they lack an adequate basis, are immaterial, and fail to raise a genuine dispute with the application.

Intervenors give no facts, expert support, or reasons why the recently identified cracks impact the shield building's ability to perform its intended safety functions. Instead, Intervenors offer Congressman Kucinich's concerns with past events and analysis of the current shield building cracking issue,⁹⁸ without indicating how he is qualified to give an opinion on the recently discovered cracks in the shield building or any possible "age-related degradation" of the shield building.⁹⁹ Intervenors also point to *Toledo Blade* articles to support their assertions. However, the articles either discuss current operating concerns or report on Congressman Kucinich's statements. Thus, Intervenors have not provided adequate support for their claims regarding the Structures AMP ability to adequately manage any aging-effects related to the shield building cracks. Instead, they have provided the type of unsupported assertions the Commission has stated will not trigger an adjudicatory hearing. *Oyster Creek*, CLI-00-6, 51 NRC 193, 208 (2000).¹⁰⁰ As discussed, the NRC performed independent evaluations, analyses, and inspections in support of the restart authorization, which confirmed that the shield building was

⁹⁸ See Intervenors' Motion at 29 (noting "contradiction" between Congressman Kucinich's analysis of concrete shield building cracking and FENOC's).

⁹⁹ *Id.* at 25

¹⁰⁰ For example, the only support Intervenors give for their claim that the Steam Generator might have to be replaced again is the statement that "a single replacement of steam generators was not enough [at the Palisades atomic reactor]." *Id.* at 12.

able to perform its intended safety functions. And the NRC's ongoing oversight will ensure the shield building continues to perform its intended safety functions.

Moreover, Intervenors have not illustrated that their claims regarding current operations at Davis-Besse raise a material issue or a genuine dispute with the application. As noted above, to renew a license, the Commission must find "reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB." 10 C.F.R. § 54.29. Intervenors have not indicated how any of their claims prevent the Staff from making the required license renewal findings. Further, Intervenors have not indicated what portions of the LRA they dispute. Thus, they fail to raise a genuine material dispute with the application.

For all the reasons outlined above, these portions of Proposed Contention 5 are inadmissible.

4. Intervenors' Assertion That the ER Needs to Account for the Cracks in the Shield Building Fails to Raise a Genuine Material Dispute with the Application

Intervenors argue that FENOC's ER is deficient because it fails to discuss any environmental impacts resulting from the structural cracks identified in Davis-Besse's shield building in October 2011.¹⁰¹ Further, Intervenors' Motion argues that Davis-Besse's SAMA analysis is deficient because it does not account for these structural cracks.¹⁰² Neither of these assertions is sufficient to support an admissible contention and, thus the Board should deny admission of these aspects of Proposed Contention 5.

¹⁰¹ Intervenors' Motion at 26.

¹⁰² *Id.*

a. The ER Need Not Consider the Environmental Impacts of the Structural Shield Building Cracks

First, intervenors' assertion that the ER must consider the environmental impacts of the structural shield building cracks¹⁰³ is fatally vague and unsupported by any basis. Intervenors point to nothing that is missing in FENOC's analysis nor do they assert any specific environmental impact has been omitted or inadequately analyzed. Further, intervenors have provided no support through qualified experts of any missing or improperly analyzed impact. As such, this portion of the contention fails because it lacks sufficient specificity to support admission.

Second, even assuming that these structural cracks had an age-related feature,¹⁰⁴ intervenors have failed to tie this structural cracking to any specific environmental impact. The Commission has made clear that for complex connections not obvious on their face must be supported by qualified experts. *See, e.g., Nuclear Management Company, LLC (Palisades Nuclear Plant), LBP-06-10, 63 NRC 314, 352 (2006), aff'd CLI-06-17, 63 NRC 727 (2006).* Here, intervenors have proffered no expert, let alone an expert opinion sufficient to tie the cracks in the shield building to an environmental impact.

Finally, assuming that intervenors are not challenging the environmental impacts of the cracks themselves, and instead seek to challenge the ER's discussion of the environmental impacts of any repairs or refurbishment of the shield building, that challenge is simply premature and speculative. At this time, FENOC's root cause analysis is on-going and no repairs or refurbishment is currently contemplated. As such, it would be too speculative for FENOC to discuss the environmental impacts from an unknown repair or refurbishment that may or may

¹⁰³ *See id.* at 9.

¹⁰⁴ The Applicant's root cause evaluation is due to the NRC on February 28, 2012.

not be required or performed. Thus, the Board should dismiss this portion of Proposed Contention 5.

b. Intervenors' Assertions Regarding the SAMA Analysis Are Unsupported

The Board has previously found that Intervenors' failed to provide adequate support for many of their assertions regarding SAMAs. *Davis-Besse*, LBP-11-13, 73 NRC ___ (slip op. at 38-48). Similarly, here, Intervenors have again made vague unsupported claims that the Applicant's SAMA analysis is inadequate.¹⁰⁵

Intervenors make a generalized claim that the structural cracks identified in the shield building should be included in the SAMA, reliability, and alternatives analyses in the ER. Intervenors have left it to the Board's and other parties' imagination as to problems in any submitted analysis. It is important to remember that an admissible contention must raise a material issue affecting the license renewal decision.

With respect to SAMAs, The Commission has stressed that the "ultimate concern" for a SAMA analysis "is whether any additional SAMA should have been identified as potentially cost beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009). "Unless it looks genuinely plausible that inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the SAMA candidates evaluated, no purpose would be served to further refine the SAMA analysis, whose goal is only to determine what safety enhancements are cost-effective to implement." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Station), CLI-10-11, 71 NRC ___ (Mar. 26, 2010) (slip op. at 39) (ADAMS

¹⁰⁵ Intervenors' Motion at 26. For example, Intervenors only claim that the potential loss of shield building safety and security function over time "is exactly the kind of analysis that should be included in FENOC SAMA analyses regarding the Davis-Besse license extension." *Id.*

Accession No. ML100880136). However, Intervenor's Motion simply asserts that the SAMA should have considered the cracks in the shield building.¹⁰⁶ Intervenor's do not allege how the cracks in the shield building would affect the likelihood of core damage frequency or a large early release frequency. Intervenor's are also silent as to how the structural cracks in the shield building might alter the cost-benefit analysis or identify a new potentially cost beneficial mitigation measure. Structural cracks that do not impair the safety function of the shield building would not impact the SAMA analysis in any way.¹⁰⁷

As to the reliability analysis and alternatives analysis, the Staff is unable to make sense of Intervenor's vague filing that points to no specific analysis in the ER or the LRA as being inadequate.¹⁰⁸ Thus, this portion of Proposed Contention 5 should be dismissed for lacking an adequate basis,¹⁰⁹ and failing to raise a genuine material dispute.¹¹⁰

5. Intervenor's Assertions That the Staff's DSEIS is Inadequate Lacks an Adequate Basis and Fails to Raise a Genuine Material Dispute

Intervenor's also argue that the NRC's DSEIS should reflect the "reality" that the shield building cracking could cause Davis-Besse's "early retirement."¹¹¹ However, as discussed, claims that these cracks will cause Davis-Besse to close and/or close early are unsupported. Further, even assuming Intervenor's are correct that Davis-Besse will need to end operations

¹⁰⁶ *Id.*

¹⁰⁷ See NUREG/CR-2300 Vol. 1, PRA Procedures Guide, A Guide to the Performance of Probabilistic Risk Assessments for Nuclear Power Plants (Jan. 1983).

¹⁰⁸ Intervenor's only assert that "the potential for Davis-Besse's cracked shield building to cause its early retirement...should be addressed by FENOC's reliability analyses." Intervenor's Motion at 26. Regarding the alternatives analysis, Intervenor's appear to argue that the cracks are going to cause the plant's early retirement. These claims are speculative and unsupported.

¹⁰⁹ The Commission "is unwilling to throw open its hearing doors to petitioners who have done little in the way of research or analysis, provide no expert opinion, and rest merely on unsupported conclusions." *McGuire/Catawba*, CLI-02-17, 56 NRC at 8.

¹¹⁰ See *Peach Bottom*, ALAB-216, 8 AEC at 20 (finding contention inadmissible because it did not give parties to this proceeding sufficient notice of the issues sought to be litigated).

¹¹¹ Intervenor's Motion at 26.

early because of the shield building cracking, this is not reasonably foreseeable in relation to the major federal action triggering the Staff's DSEIS (i.e., the decision to renew the plant's license). As such, this is not an issue that the Staff needs to address in the DSEIS. *Louisiana Energy Services, L.P.*, (National Enrichment Facility), CLI-06-15, 63 NRC 687, 698 (2006) (holding that NEPA requires only that the NRC consider "reasonably foreseeable" indirect effects of a proposed licensing action). Therefore, this claim is inadmissible as it lacks an adequate basis and fails to raise a genuine material dispute.¹¹²

CONCLUSION

For the reasons set forth above, the Board should find Contention 5 admissible in part and inadmissible in part.

Respectfully submitted,

Signed (electronically) by

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¹¹² Any claim about the inadequacy of the Staff's DSEIS is also premature. Because the Staff has not yet published its DSEIS, Intervenor must file contentions based on the ER, and may amend those contentions if the DSEIS contains different information. 10 C.F.R. § 2.309(f)(2); Board's ISO at B.1.

Harris, Brian

From: Terry Lodge [tlodge50@yahoo.com]
Sent: Thursday, January 05, 2012 11:37 AM
To: apolonsky@morganlewis.com; Harris, Brian
Cc: ksutton@morganlewis.com; 'djenkins@firstenergycorp.com'; Kevin Kamps
Subject: RE Davis-Besse, Docket No. 50-346 (proposed new contention filing)

Counsel:

Unless the Staff and FENOC will consent to same being added to the license extension proceeding, it is the Intervenor's intention to soon move to add a supplemental contention which addresses the shield building cracking phenomena into the case.

We intend to file our motion by Monday, January 10, 2012. Pursuant to 10 CFR § 2.323, we request that you consent so that it will not be necessary for us to formally move for admission of the contention.

Thank you.

Terry Lodge

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
FIRSTENERGY NUCLEAR OPERATING CO.) Docket No. 50-346-LRA
)
(Davis-Besse Nuclear Power Station, Unit 1))
)

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF'S ANSWER TO MOTION TO ADMIT NEW CONTENTION REGARDING THE SAFETY IMPLICATIONS OF NEWLY DISCOVERED SHIELD BUILDING CRACKING" in the above-captioned proceeding have been served on the following by Electronic Information Exchange this 6th day of February, 2012.

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