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 FOR ADMISSION OF CONTENTION NO. 6 ON SHIELD BUILDING CONCRETE VOID, CRACKING AND BROKEN REBAR PROBLEMS

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(i)(1), the Staff of the U.S. Nuclear Regulatory

Commission (Staff) hereby files its answer to the "Motion for Admission of Contention No. 6 on

Shield Building Concrete Void, Cracking and Broken Rebar Problems," jointly filed by Beyond

Nuclear, Citizens Environment Alliance of Southwestern Ontario, Don't Waste Michigan, and the

Green Party of Ohio (collectively, Intervenors)¹ regarding FirstEnergy Nuclear Operating

Company's (FENOC) license renewal application (LRA) for Davis-Besse Nuclear Power Station,

Unit 1 (Davis-Besse).²

As more fully set forth below, the Staff opposes the admission of Contention 6.

Essentially, Intervenors' Motion for Admission of Contention 6 is akin to a request for reconsideration as it attempts to relitigate issues already decided with respect to Intervenors'

¹ See Motion for Admission of Contention 6 on Shield Building Concrete Void, Cracking and Broken Rebar Problems (Motion to Admit Contention 6)(Apr. 21, 2014) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14112A007) (Motion for Admission of Contention 6). Intervenors' Motion was supported by seven exhibits, six of which were filed by e-mail on April 21, 2014 and one of which was filed via the EIE on April 22, 2014. Section 2.323(a) provides that the motions practice 10 day answer period does not apply to motions to admit new or amended contentions filed after the deadline.

² Letter from Barry S. Allen, Vice President, dated August 27, 2010, transmitting the license renewal application for Davis-Besse (ADAMS Accession No. ML102450565) (LRA).

proposed Contention 5, as amended and/or supplemented,³ relating to the shield building, and asserts that the Atomic Safety and Licensing Board's (Board) ruling on Contention 5 (LBP-12-27) was erroneous. These challenges are untimely and not a proper subject for a contention.⁴

Moreover, Intervenors' Motion for Admission of Contention 6 should be denied because Intervenors' have not met the Commission's contention admissibility standards for new or amended contentions. Specifically, Intervenors have not demonstrated that their Motion is timely under 10 C.F.R. § 2.309(f)(2) or that there is good cause for filing after the deadline pursuant to section 2.309(c).⁵ Instead, Intervenors primarily refer back to information offered in support of Contention 5, which the Board held did not constitute new and materially different information. Intervenors also do not demonstrate how any information related to the August/September 2013 shield building cracks, February 2014 concrete void, February 2014 rebar damage, or the Staff's April 15, 2014 Request for Additional Information (RAI) is new and materially different than previously available information.

Additionally, Intervenors' Motion for Admission of Contention 6 should be denied because it does not meet the Commission's general contention admissibility requirements in 10 C.F.R. § 2.309(f)(1). Specifically, Intervenors' proposed Contention 6: (1) raises issues outside the scope of this proceeding, 6 (2) does not raise a genuine material dispute with the license

³ See *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), LBP-12-27, 76 NRC 583 (2012) (order denying motions to admit, to amend, and to supplement Intervenors' proposed Contention 5 related to the shield building cracking).

⁴ 10 C.F.R. § 2.323(e) (providing ten days for filing of motion for reconsideration of action); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-39, 34 NRC 273, 282 (1991); *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Unit 3), LBP-98-28, 48 NRC 279 (1998). The Board has previously warned Intervenors about their filing practices, including the timeliness of their submissions. *See, e.g.,* Memorandum and Order (Granting Motion To Strike and Requiring Re-filing of Reply) (Feb. 18, 2011) (ADAMS Accession No. ML110490269).

⁵ See *infra* at n. 161 (providing explanation for why pre-August 2012 rules apply).

⁶ These include (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 cracks discovered on October 10, 2011 in the shield building constitute a

renewal application, and (3) lacks an adequate basis because it offers only bare assertions that the Structures Monitoring and Shield Building Monitoring Aging Management Programs (AMPs) and the draft Supplemental Environmental Impact Statement (DSEIS) are inadequate.

For all the foregoing reasons, Intervenors' Motion for Admission of Contention 6 should be denied.

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, 2017.⁷ The Staff accepted the LRA for review, and published a *Federal Register* Notice on October 25, 2010, providing a Notice of Opportunity for Hearing.⁸

I. Initial Request for Hearing and Disposition of Those Contentions

On December 27, 2010, Joint Petitioners filed a petition to intervene.⁹ On April 26, 2011, the Board held that Intervenors had standing and admitted in part two of four originally proffered contentions.¹⁰ FENOC appealed LBP-11-13 to the Commission.¹¹ On review, the

safety issue during the current operating period, (4) assertions that the concrete void and damaged rebar problems identified in February 2014 and the previously unidentified cracks discovered in August/September 2013 in the shield building constitute a safety issue during the current operating period, and (5) arguments that there is a "safety culture" issue at Davis-Besse.

⁷ LRA at 1.2-1. If the LRA is approved, Davis-Besse's new license expiration date would be April 22, 2037.

⁸ 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).

⁹ 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) (ADAMS Accession No. ML103610406).

¹⁰ FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-11-13, 73 NRC 534, 588-589 (2011) (ruling that Intervenors had standing and admitting a reformulated and consolidated alternative energy contention and a limited severe accident mitigation alternatives (SAMA) analysis contention). The Intervenors also filed several motions following the March 11, 2011 accident at the Fukushima Dai-ichi site in Japan, and related to Waste Confidence. These 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

Commission reversed the Board's admission of the alternative energy contention and reversed in part the admission of the limited severe accident mitigation alternatives (SAMA) contention. ¹² FENOC filed a motion for summary disposition on this limited SAMA contention, which the Board granted. ¹³

II. <u>Identification of and Litigation Surrounding Shield Building Cracks Discovered on October 10, 2011</u>

The shield building cracking has been the subject of extensive litigation and numerous filings and orders. Intervenors' Motion for Admission of Contention 6 incorporates by reference all of their previous filings related to proposed Contention 5 on the shield building cracking issue, ¹⁴ which were rejected by the Board in LBP-12-27. ¹⁵ Thus, to put into context the issues raised by Intervenors' proposed Contention 6, the Staff provides the following background on the shield building and its purpose and the procedural history regarding Intervenors' previous challenges related to the shield building. ¹⁶

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 141 (2011)(ADAMS Accession No. ML11252A535) (denying request to stay licensing decisions).

¹¹ FirstEnergy's Notice of Appeal of LBP-11-13 (May 6, 2011) (ADAMS Accession No. ML111260600).

¹² FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1),CLI-12-08, 75 NRC 393 (2012).

¹³ See *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), LBP-12-26, 76 NRC 559 (2012).

¹⁴ Motion to Admit Contention 6 at 5.

¹⁵ FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-12-27, 76 NRC 583 (2012).

¹⁶ Although the procedural history of Intervenors' previous challenges to the shield building hs been discussed in detail in the Staff's previous filings, the substantial time between the Borad's order and Intervenors' current filing warranted consolidating that historical record into this fling without incorporating those filings by reference.

A. Description and Purpose of the Shield Building

The shield building is described in Davis-Besse's Updated Safety Analysis Report (USAR) and in FENOC's LRA.¹⁷ Specifically, the USAR states that Davis-Besse's containment system consists of two structures: a steel containment vessel¹⁸ and a reinforced concrete shield building.¹⁹ An annular space is provided between the wall of the containment vessel and the shield building, and clearance is also provided between the containment vessel and the dome of the shield building. With the exception of the concrete under the containment vessel there are no structural ties between the containment vessel and the shield building above the foundation slab.²⁰ Above this there is virtually unlimited freedom for differential movement between the containment vessel and the shield building.²¹

The reinforced concrete shield building was designed in accordance with ACI 307-69, Specification for the Design and Construction of Reinforced Concrete Chimneys, and checked by the Ultimate Strength Design Method in accordance with ACI 318-63. Load combinations specified in ACI 307-69 provide the design basis of the shield building.²²

The shield building is designed to provide biological shielding during normal operation and from hypothetical accident conditions. The building provides a means for collection and filtration of fission product leakage from the containment vessel following a hypothetical accident through the Emergency Ventilation System, an engineered safety feature designed for that purpose. In addition, the building provides environmental protection for the containment vessel

¹⁷ See USAR at 1.2.10 and 3.8.2.2: See LRA at 2.4.1.

²⁰ In other words, both structures are free-standing.

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¹⁸ The containment vessel is designed to withstand accident pressures and temperatures. USAR at 1.2.10.1, 3.8.2.1.

¹⁹ USAR at 1.2.10.1, 3.8.2.2.

²¹ USAR at 1.2.10.2, 3.8.2.

²² *Id.* at 1.2.10.1, 3.8.2.2.

from adverse atmospheric conditions and external missiles.²³ It is the steel containment vessel, not the shield building, that is designed to keep the radiation inside the reactor from reaching the environment.²⁴

B. Shield Building Cracks Identified In 2011

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. 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." 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. ²⁷

C. <u>Motion to Admit Contention 5 and Motions to Amend or Supplement Contention 5</u>

On January 10, 2012, Intervenors filed a motion to admit Contention 5 based on the cracks discovered in the shield building in October 2011.²⁸ In short, Contention 5 claimed that

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²³ *Id.* at 1.2.10.2, 3.8.2.2.

²⁴ See Intervenors' Exhibit 6. See USAR at 1.2.10.1, 3.8.2.1

²⁵ See NRC, "Q&As for Davis-Besse Shield Building Issues" http://www.nrc.gov/info-finder/reactor/davi/davis-besse-shield-building-qa.pdf (last visited May 9, 2014). See also Request for Additional Information for the Review of the Davis-Besse Nuclear Power Station License Renewal Application (TAC No. ME4640) (Dec. 27, 2011) (ADAMS Accession No. ML11333A396) (NRC RAI B.2.39-13).

²⁶ NRC RAI B.2.39-13 at 5.

²⁷ Confirmatory Action Letter (CAL) 3-11-001 – Davis-Besse Nuclear Power Station (Dec. 2, 2011) (ADAMS Accession No. ML11336A355).

²⁸ Motion for Admission of Contention No. 5 on Shield Building Cracking (Jan. 10, 2012) (ADAMS Accession No. ML12010A172) (Intervenors' Motion to Admit Contention 5).

the October 2011 shield building cracking raised both safety and environmental concerns and that the LRA was inadequate for failing to discuss how the aging effect of these cracks would be managed and how they impacted the SAMA analysis.²⁹ The Staff opposed the admission of Contention 5 as submitted,³⁰ but recognized that a limited portion of Contention 5, as revised by the Staff, could be admitted by the Board as a safety contention of omission.³¹ In particular, the Staff noted that FENOC's LRA did not contain a discussion of how, if at all, the existing AMPs accounted for any possible aging effects of the shield building cracking.

The Intervenors supplemented and/or amended Contention 5 based on claims of new and materially different information. As discussed in more detail below, the Staff opposed each supplement or amendment to Contention 5 because, among other things, Intervenors did not establish the timeliness of their filings and the limited admissible portion of Intervenors' proposed Contention 5 was mooted by the submission of the Shield Building Monitoring AMP, which was not sufficiently challenged by Intervenors.

Intervenors contend 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.

Intervenors' Motion to Admit Contention 5 at 10-11. Intervenors also argued that the shield building cracking must be discussed in the ER and the Staff's supplemental environmental impact statement. *Id.* at 3-4, 8-9. Intervenors also made several arguments about the current safety of Davis-Besse, as well as past and current management practices.

²⁹ Intervenors' Motion to Admit Contention 5.

³⁰ Intervenors' proposed Contention 5 stated:

³¹ See, e.g., NRC Staff's Answer to Motion to Admit New Contention Regarding the Safety Implications of Newly Discovered Shield Building Cracking (Feb. 6, 2012) (ADAMS Accession No. ML12037A200) (Staff's Answer to Contention 5) at 1-2;16 ("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."). See id. at 8-9 (noting that the Intervenors' proposed contention fails to raise an admissible environmental issue).

1. First Motion to Supplement

Intervenors' First Motion to Supplement was filed on February 27, 2012,³² and was based on claims that a January 31, 2012 NRC inspection report and a February 8, 2012 press release from Congressman Dennis Kucinich was new and materially different information.³³ The Staff opposed Intervenors' First Motion to Supplement Contention 5 because it did not identify any new and materially different information.³⁴

2. Shield Building Events and FENOC Submissions

On February 27, 2012, FENOC submitted a Shield Building Root Cause Report (Root Cause Report) to the NRC, which "provide[d] the results of the root cause evaluation and corrective actions, including long-term monitoring requirements." The Root Cause Report was developed using a contractor-developed root cause assessment report by Performance Improvement International (PII). The Root Cause Report concluded that the direct cause of the shield building cracking was "the integrated affect of moisture content, wind speed, temperature, and duration from the blizzard of 1978," and the root cause "was due to the design

³² See Intervenors' Motion To Amend 'Motion For Admission of Contention No. 5.' (Feb. 27, 2012) (ADAMS Accession No. ML12037A200) (Intervenors' First Motion to Supplement Contention 5).

³³ Intervenors' First Motion to Supplement Contention 5 at 1-3.

³⁴ See NRC Staff's Answer to Intervenors' Motion to Amend 'Motion for Admission of Contention No. 5' (Mar. 8, 2012) (ADAMS Accession No. ML12068A095). FENOC also opposed Intervenors' Motion. See FENOC's Answer Opposing Intervenors' Motion to Amend Proposed Contention 5 on Shield Building Cracking (Mar. 8, 2012) (ADAMS Accession No. ML12068A429).

³⁵ See Letter L-12-065 from Barry S. Allen to Cynthia D. Pederson, "Davis-Besse Nuclear Power Station, Unit 1 Docket Number NPF-3 Submittal of Shield Building Root Cause Evaluation," (Feb. 27, 2012) (ADAMS Accession No. ML120600056). See also CAL No. 3-11-001 (Dec. 2, 2011) (ADAMS Accession No. ML11336A355) (noting that "FENOC will provide the results of the root cause evaluation and corrective actions to the NRC, including any long-term monitoring requirements, by February 28, 2012.").

³⁶ The Root Cause Report noted that PII "was the prime contractor with prior industry experience in both root cause investigation and modeling and analysis capability of nuclear containment structures." Davis-Besse Nuclear Power Station, Unit 1, Submittal of Revision 1 of Shield Building Root Cause Evaluation (May 16, 2012) (ADAMS Accession No. ML12142A053) at Cover Letter for L-12-205 and Root Cause Analysis Report at 8. The Root Cause Report referenced PII's report in several places. *See, e.g., id.* at 40, 42, 43, and 44.

specification for construction of the shield building...that did not specify application of an exterior sealant from moisture."³⁷

On the week-ending March 16, 2012, Staff did an on-site inspection in which they reviewed FENOC's root cause analysis and observed supporting vendor tests, among other things.³⁸ At that inspection, Staff "identified minor weaknesses in the [Root Cause Report and PII root cause assessment report] associated with the level of detail in the documentation provided."³⁹

On April 5, 2012, FENOC submitted revisions to the LRA⁴⁰ which included an AMP related to the recently identified shield building cracking in response to an NRC request for additional information (Shield Building Monitoring AMP).⁴¹ FENOC's submission explained that while the Root Cause Report did not identify any new aging effects associated with the shield building cracking, "a new plant-specific aging management program titled 'Shield Building Monitoring Program' is provided to periodically inspect the [shield building] to confirm that there are no changes in the nature of the identified laminar cracks."⁴² The Shield Building Monitoring AMP's stated purpose is to "provide reasonable assurance that the existing environmental"

³⁷ Root Cause Analysis Report at 59. Notably, the Root Cause Report concluded that "[t]here was no evidence of typical concrete time-dependent aging failure modes." *Id.* at 6.

³⁸ Davis-Besse Nuclear Power Station – Inspection to Evaluate the Root Cause Evaluation and Corrective Actions for Cracking in the Reinforced Concrete Shield Building of the Containment System 05000346/2012 009 (DRS) 12/01/2011 – 5/09/2012 (June 21, 2012) (ADAMS Accession No. ML12173A023) (NRC's June 21, 2012 Inspection Report).

³⁹ NRC's June 21, 2012 Inspection Report at cover page.

⁴⁰ FirstEnergy Notification of Filing Related to Proposed Shield Building Cracking Contention (Apr. 5, 2012) (ADAMS Accession No. ML12097A216) (FENOC's April 5, 2012 Submittal).

⁴¹ See FENOC's April 5, 2012 Submittal at Attachment L-12-028 Page 5 of 8. The new AMP is in Section B.2.43 of the LRA and is entitled "Shield Building Monitoring Program."

⁴² *Id*. at Page 1 of 8.

conditions will not cause aging effects that could result in a loss of component intended function."43

FENOC then filed a Motion to supplement its answer to proposed Contention 5 given the submission of the Shield Building Monitoring AMP.⁴⁴ FENOC argued that the Shield Building Monitoring AMP "moots both (1) the proposed [Contention [5's] challenges to whether FENOC addressed aging management of shield Building cracking, and (2) the revised contention of omission set forth by the NRC Staff in its Answer.⁴⁵ The Board granted FENOC's Motion to Supplement on April 17, 2012. On May 14, 2012, Intervenors filed an unopposed motion to vacate and reschedule oral argument on Contention No. 5.⁴⁷ In that motion, Intervenors requested that the Board vacate the May 18, 2012 oral argument so that they could "move to amend or supplement their proposed Contention 5 based upon the [Shield Building Monitoring

⁴³ FENOC's April 5, 2012 Submittal at Enclosure Page 1 of 15. FENOC indicated that the "requirements of the plant-specific Shield Building Monitoring [AMP] are to be administered in conjunction with the existing Structures Monitoring Program." FENOC's April 5, 2012 Submittal at Attachment L-12-028 Page 6 of 8.

⁴⁴ See FENOC's Unopposed Motion for Leave to Supplement Its Answer to the Proposed Shield Building Cracking Contention (Apr. 16, 2012) (ADAMS Accession No. MI12107A485) (FENOC's Motion to Supplement).

⁴⁵ FENOC's Motion to Supplement at 2. *See also id.* (stating that supplement is "necessary to ensure that all material relevant information and arguments relative to admission of the proposed Contention are properly before the Board, and to prevent unnecessary litigation of the now-mooted issues").

⁴⁶ Board Order (Granting FENOC's Unopposed Motion for Leave to Supplement Its Answer) (Apr. 17, 2012) (ADAMS Accession No. ML12108A213).

⁴⁷ See Intervenors' Unopposed Motion to Vacate and Reschedule Oral Argument on Proposed Contention No. 5 (May 14, 2012) (ADAMS Accession No. ML12135A405) (Intervenors' Unopposed Motion to Vacate).

⁴⁸ See Notice and Order (Scheduling Oral Argument) (Mar. 28, 2012) (ADAMS Accession No. ML12088A340).

AMP]."⁴⁹ On May 15, 2012, the Board issued an order granting Intervenors' Motion to Vacate Oral Argument.⁵⁰

On May 16, 2012, FENOC submitted a Revised Root Cause Analysis (Revised Root Cause Report), which addressed observations made by NRC during its March 2012 on-site inspection. FENOC noted that "[t]hese observations did not affect the overall conclusions [of the Root Cause Report] or the corrective actions being taken. FENOC also noted that the contractor root cause assessment report by Performance Improvement International (PII) was revised to incorporate these observations, and a non-proprietary version of the assessment report was submitted to the NRC via letter L-12-196 on May 14, 2012.

3. <u>Intervenors' Second Motion to Amend and Supplement</u>

On June 4, 2012, Intervenors filed their Second Motion to Amend and Supplement proposed Contention 5 based on the Shield Building Monitoring AMP. ⁵⁵ Intervenors' Second Motion to Amend and Supplement claimed that the Revised Root Cause Report and PII's April

⁵⁰ See Order (Granting Unopposed Motion to Vacate Oral Argument) (May 15, 2012) (ADAMS Accession No. ML12136A456).

⁴⁹ Intervenors' Unopposed Motion to Vacate at 2.

⁵¹ L-12-205, Submittal of Revision 1 of Shield Building Root Cause Evaluation (May 16, 2012) (ADAMS Accession No. ML12142A053) (Revised Root Cause Report).

⁵² *Id.* at 5-7 (summarizing revisions and noting that the NRC's inspection observations do not invalidate the methodology, assessment and analysis, or conclusions of the root cause analysis report, but do identify areas for improvement).

⁵³ PII made the determinations regarding what material was proprietary. In their Fourth Motion to Amend and/or Supplement Contention 5, Intervenors made baseless claims that the redactions were "aimed at thwarting public access to embarrassing truths about the shabby state of the shield building." Intervenors' Fourth Motion to Amend and/or Supplement Contention 5 at 29 (ADAMS Accession No. ML12205A507).

⁵⁴ See *id.* at cover page. See *also* April 20, 2012 PII Report at i (noting that Root Cause Report ("RCR") was "revised to include comments and responses following NRC and FENOC review.").

⁵⁵ See Intervenors' Motion to Amend and Supplement Proposed Contention No. 5 (Shield Building Cracking) (June 4, 2012) (ADAMS Accession No. ML12156A411) (Intervenors' Second Motion to Amend and Supplement). Specifically, Intervenors stated that they were "supplementing their cracking contention for the purpose of exposing discrepancies between FENOC's February 27, 2012 [Root Cause Report] and the [Shield Building Monitoring AMP]." *Id.* at 2.

2012 Report contained new and material information that exposed discrepancies between FENOC's Root Cause Report and the Shield Building Monitoring AMP.⁵⁶

On June 21, 2012 the Staff issued an inspection report regarding the evaluation of FENOC's root cause analysis and corrective actions related to the cracking in the shield building.⁵⁷ The inspection report noted that FENOC's staff, which includes contractor PII, "established a sufficient basis for the causes of the shield building laminar cracking related to: the environmental factors associated with the 1978 blizzard, the lack of an exterior moisture barrier, and the structural design elements of the shield building."⁵⁸ The NRC's June 21, 2012 Inspection Report also stated that the minor weaknesses identified with the documentation related to the Root Cause Report "did not constitute performance deficiencies or findings because they did not adversely affect the outcome of the root cause process."⁵⁹

On June 29, 2012, Staff and FENOC filed Answers opposing Intervenors' Second Motion to Amend and Supplement Contention 5. 60 Staff's June 29, 2012 Answer stated, among other things, that (1) proposed Contention 5 was moot given the submittal of the Shield Building Monitoring AMP, and (2) the Revised Root Cause Report did not contain any materially different information than information previously available. 61

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⁵⁶ See generally Intervenors' Second Motion to Amend and Supplement (raising concerns about: new locations and types of structural damage; Root Cause Report's conclusions; rebar issues (moisture and spacing); main steam line issues; FENOC's management style; dome parapet cracking, 2011 RAIs, among other things).

⁵⁷ NRC's June 21, 2012 Inspection Report.

⁵⁸ *Id.* at cover page.

⁵⁹ *Id*.

⁶⁰ NRC Staff's Answer to Motion to Amend and Supplement Proposed Contention No. 5 (Shield Building Cracking) (June 29, 2012) (ADAMS Accession No. ML12181A013). FENOC's Answer Opposing Intervenors' Motion to Amend and Supplement Proposed Contention No. 5 (Shield Building Cracking) (June 29, 2012) (ADAMS Accession No. ML12181A303);

⁶¹ Intervenors filed a combined reply on July 6, 2012. Intervenors' Combined Reply to FENOC and NRC Staff Opposition to 'Motion to Amend and Supplement Proposed Contention No. 5 (Shield Building Cracking' (July 6, 2012) (ADAMS Accession No. ML12188A792).

4. Intervenors' Third and Fourth Motions to Amend and/or Supplement

Intervenors filed a Third Motion to Amend and/or Supplement proposed Contention 5 on July 16, 2012. 62 Intervenors' Third Motion to Amend and/or Supplement claimed that the Revised Root Cause Report contained new and materially different information which indicated that the Shield Building Monitoring AMP was inadequate. 63 Intervenors filed their Fourth Motion to Amend and/or Supplement Contention 5 on July 23, 2012. 64 Intervenors' Fourth Motion to Amend and/or Supplement claimed that PII's April 20, 2012 Root Cause Report contained new and materially different information than previously available which indicated that the Shield Building Monitoring AMP was inadequate. Staff filed an answer on August 17, 2012 opposing the Third and Fourth Motions to Amend and/or Supplement. 65 The Staff's answer explained that Intervenors' Third and Fourth Motions to Amend and/or Supplement did not identify any new and materially different information or raise any admissible challenges to FENOC's proposed Shield Building Monitoring AMP. 66 FENOC submitted a revised Shield Building Monitoring AMP on August 16, 2012. 67

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⁶² Intervenors' Third Motion to Amend and/or Supplement Proposed Contention No. 5 (Shield Building Cracking) (July 16, 2012) (ADAMS Accession No. ML12198A561) (Intervenors' Third Motion to Amend and/or Supplement Contention 5).

⁶³ Intervenors' Third Motion to Amend and/or Supplement stated that Intervenors intended to file a fourth motion to amend proposed Contention 5 no later than Monday, July 23, 2012. On July 17, 2012, the Board issued an order instructing Staff and FENOC to each file one answer responding to both of these motions no later than August 17, 2012. Order (Setting Dates for Answers and Reply to Motions to Amend Contention 5) (July 17, 2012) (ADAMS Accession No. ML12199A341).

⁶⁴ Intervenors' Fourth Motion to Amend and/or Supplement (July 23, 2012) (ADAMS Accession No. ML12205A507).

⁶⁵ NRC Staff's Answer to Intervenors' Third and Fourth Motions to Amend and/or Supplement Proposed Contention No. 5 (Shield Building Cracking) (Aug. 17, 2012) (ADAMS Accession No. ML12230A212) (NRC Staff's Answer to Intervenors' Third and Fourth Motions).

⁶⁶ NRC Staff's Answer to Intervenors' Third and Fourth Motions.

⁶⁷ See L-12-284 Davis-Besse Nuclear Power Station, Unit No. 1 Docket No. 50-346, License Number NPF-3, Reply to Request for Additional Information for the Review of the Davis-Besse Nuclear Power Station, Unit No. 1, License Revnewal Application (TAC No. ME4640) and License Renewal Application Amendment No. 31 (Aug. 16, 2012) (ADAMS Accession No. ML12230A220). Staff's

5. Intervenors' Fifth Motion to Amend and/or Supplement

From August 16, 2012 to August 17, 2012, Intervenors submitted their Fifth Motion to Amend and/or Supplement Contention 5,⁶⁸ which was based on documents received from the NRC in response to Intervenors' January 26, 2012, Freedom of Information Act (FOIA) request. Notably, Intervenors' Fourth Motion to Amend and/or Supplement Contention 5 contained references to some of the same FOIA documents.

Staff filed an answer opposing Intervenors' Fifth Motion to Amend and/or Supplement Contention 5 because it did not identify any new and materially different information and did not meet the Commission's contention admissibility requirements. ⁶⁹ Instead, the Fifth Motion to Amend and/or Supplement inexplicably focused on issues outside the limited scope of license renewal proceedings, including: 1) the adequacy of Staff's review of the shield building cracking with respect to current operations, (2) the Staff's December 2, 2011 decision to allow restart of the reactor, (3) the shield building's compliance with current licensing requirements, ⁷⁰ and (4) the adequacy of FENOC's root cause evaluation of the shield building cracking. ⁷¹

evaluation of the RAI response and Shield Building Monitoring AMP was ongoing at the time Intervenors submitted their Fifth Motion to Amend and/or Supplement Proposed Contention No. 5 and Staff filed its answer to it.

⁶⁸ See Intervenors' Fifth Motion to Amend and/or Supplement Proposed Contention No. 5 (Shield Building Cracking) (Aug. 16, 2012) (ADAMS Accession No. ML12229A584) ("Intervenors' Fifth Motion to Supplement"). Intervenors' Fifth Motion to Supplement included nine appendices referencing documents Intervenors received from the NRC in response to their January 26, 2012 FOIA request. Intervenors' Fifth Motion and appendices 1-5 were filed on August 16, 2012 (ADAMS Accession Nos. ML12229A585, ML12229A586, ML12229A587, ML12229A588, and ML12230A000), while appendices 6-9 were filed on August 17, 2012 (ADAMS Accession Nos. ML12230A001, ML12230A002, ML12230A003, and ML12230A004).

⁶⁹ NRC Staff's Answer to Intervenors' Fifth Motion to Amend and/or Supplement Proposed Contention No. 5 (Shield Building Cracking (Sept. 10, 2012) (ADAMS Accession No. ML12254A138).

⁷⁰ See Intervenors' Fifth Motion to Amend and/or Supplement at 95 (discussing Intervenors' basis for having a genuine dispute with the applicant).

⁷¹ See *id.* at 91 (describing basis for contention). See *also id.* at 95 ("Until there is a thorough, global investigation of the nature, extent and causation [of the shield building cracking], the muted warnings of the NRC Staff stand as creating a genuine dispute of fact.").

6. Hearing and Ruling On Intervenors' Contention 5, As Amended/Supplemented

An oral argument on the admissibility of Contention 5 and the five motions to amend and/or supplement was held on November 5 and 6, 2012 in Toledo, Ohio.⁷² On December 28, 2012, the Board issued LBP-12-27,⁷³ which denied Intervenors' motion to admit Contention 5 and denied all five motions to amend or supplement.⁷⁴ The Board provided an analysis on each motion to amend or supplement, and explained that each motion failed to articulate how the information in the Intervenors' sources was new and materially different.⁷⁵

The Board also held that Intervenors' challenges to the Shield Building Monitoring AMP were inadequate because the challenges were only allegations that the AMP was deficient and did not identify any specific portion of the AMP as inadequate or wrong. Further, the Board noted that to the extent Intervenors challenged the root cause report's conclusions on the cause of the cracking, they did not demonstrate "how such a challenge is material to the decision the NRC must make regarding FENOC's LRA." Moreover, the Board held that a number of Intervenors' claims were outside the scope of this license renewal proceeding, including: claims

⁷² See Transcript of Hearing, November 5, 2012 – First Energy Nuclear Operating Company, Davis Besse Nuclear Power Station (Nov. 5, 2012) (ADAMS Accession No. ML12314A247); Transcript of Hearing, November 6, 2012 – First Energy Nuclear Operating Company, Davis Besse Nuclear Power Station (Nov. 6, 2012) (ADAMS Accession No. ML12314A370).

⁷³ FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), LBP-12-27, 76 NRC 583 (2012).

⁷⁴ *Davis-Besse*, LBP-12-27, 76 NRC at 583.

⁷⁵ *Id.* at 600-612 (ruling on Intervenors' motions). In its ruling on Intervenors' motions to amend and/or supplement, the Board stressed that information has to be both new and *material*. *Id.* at 604. Further, the Board cited *Duke Energy Corp*. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 336 (1999) for the proposition that "[a]sking questions and seeking additional information is an essential part of the NRC's licensing process, and it is clear that such questioning does not automatically give rise to an admissible contention." *Id.* at 604-05.

⁷⁶ *Davis-Besse*. LBP-12-27, 76 NRC at 604.

⁷⁷ Id.

that the shield building cracking constituted a current safety issue⁷⁸ and challenges to FENOC's "safety culture."⁷⁹ The Board also found that Intervenors' claims about future cracking and claims that the environmental analysis was deficient were unsupported.

The Board held that, as originally proposed, a limited portion of Contention 5 was "an admissible [safety] contention of omission challenging FENOC's failure to provide a plan to monitor and/or address the shield building cracking in its LRA."⁸⁰ However, the Board held that this limited portion of Contention 5 was no longer admissible because FENOC's submission of its Shield Building Monitoring AMP mooted the contention of omission⁸¹ and that Intervenors did not present a material challenge to the adequacy of the AMP.⁸² Therefore, the Board denied Intervenors' motion to admit Contention 5 and Intervenors' five subsequent motions to amend and/or supplement Contention 5.⁸³

⁷⁸ *Id.* at 609 (citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8-10 (2001) for the proposition that current safety issues are beyond the scope of a license renewal proceeding).

⁷⁹ *Id.* at 611, n. 171 (citing *Prairie Island*, CLI-10-27, 72 NRC at 491 for the proposition that "broad-based issues akin to safety culture -- such as operational history, quality assurance, quality control, management competence, and human factors -- [are] beyond the bounds of a license renewal proceeding").

⁸⁰ *Davis-Besse*, LBP-12-27, 76 NRC at 609. While the Board did not say safety, the Board expressly noted that it adopted the Staff's limited version of the contention as admissible. In turn, the Staff's limited version of Contention 5 was a safety contention of omission.

⁸¹ Davis-Besse, LBP-12-27, 76 NRC at 610 (noting that where a contention alleges the omission of particular information or issue from an application, and the information is later supplied by the applicant, the contention is moot).

⁸² Id.

⁸³ *Id*. at 611.

III. Previously Unidentified Cracking, Concrete Void, and Damaged Rebar

A. Cracking Discovered in August/September 2013

On August 26, 2013, while performing examinations of existing core bore holes as part of FENOC's long term monitoring commitments to the NRC for the shield building, ⁸⁴ FENOC identified a previously undetected crack in the shield building using a new borescope with increased resolution and better camera angle control. As part of the extent of condition assessment in September 2013, FENOC examined all 80 existing core bore holes on the shield building using the new boroscope and identified 15 core bore holes containing previously unidentified cracks.

While some of the previously unidentified crack locations can be explained as preexisting cracks that were not originally identified due to limitations with the borescope originally
used, the remainder of the previously unidentified crack locations cannot be explained at this
time. FENOC has contracted with PII to conduct testing and further evaluation to determine the
cause and apparent progression of the unexplained cracks, the results of which are expected in
June 2014. FENOC drilled additional new core bores in 2013 that were sent off for laboratory
testing to assist in determining the age and cause of these previously unidentified crack
indications. The Staff issued an RAI on April 15, 2014 requesting FENOC to describe and
justify modifications or enhancements, if any, that may be potentially required to the AMPs
credited for the shield building for license renewal, considering this recent plant-specific
operating experience.⁸⁵

 $^{^{84}}$ See NRC Confirmatory Action Letter (CAL) (Dec. 2, 2011) (ADAMS Accession No. ML11336A355).

⁸⁵ RAI B.2.43-4 (ADAMS Accession No. ML14097A454).

B. Concrete Void

On February 14, 2014, FENOC informed the NRC that it had discovered an unfilled area (void) in the concrete along the top of the 2011 construction opening on the inside wall of the shield building. The void occurred as a result of the process used to pour concrete during restoration of the 2011 construction opening associated with the reactor pressure vessel head replacement. The void condition was discovered while the plant was shut down for the 2014 steam generator replacement outage. Subsequently, FENOC performed an operability evaluation of the shield building and determined that the shield building could have performed its intended safety functions despite the existence of the void. The void was repaired prior to restoring the shield building construction opening for the 2014 outage. ³⁶

The NRC reviewed FENOC's operability evaluation, which analyzed the impacts of the concrete void during the previous operating cycles, and verified that the shield building could have fulfilled its intended safety functions, even with the existence of the concrete void.⁸⁷ NRC inspectors also verified that the shield building concrete void was adequately repaired.⁸⁸

C. Damaged Rebar

During FENOC's creation of a new construction opening to support the 2014 steam generator replacement outage, the process used to create the new construction opening damaged some of the shield building reinforcement bars (rebar). The rebar damage was not present while the plant was operating and when the shield building was required to be operable. FENOC repaired the damaged rebar prior to restoring the shield building construction opening for the 2014 outage.⁸⁹ NRC inspectors verified that the damaged rebar was adequately

⁸⁸ *Id*.

⁸⁶ See Preliminary Notification of Event or Unusual Occurrence – PNO-III-14-003A (Apr. 28, 2014) (ADAMS Accession No. ML14118A185) (providing update to previous PN on this issue).

⁸⁷ *Id*.

⁸⁹ *Id*.

repaired.⁹⁰ The Staff's April 15, 2014 RAI requested FENOC to describe and justify modifications or enhancements, if any, that may be potentially required to the AMPs credited for the shield building for license renewal, considering this recent plant-specific operating experience.

IV. INTERVENORS' MOTION TO ADMIT CONTENTION 6

On April 21, 2014, Intervenors submitted the instant motion for admission of Contention 6.⁹¹ Intervenors assert that their Motion is based on the shield building cracking identified in August/September 2013, the concrete void discovered in February 2014, and damaged rebar of February 2014.⁹² However, the Motion also incorporated the filings and exhibits associated with Intervenors' Motion to Admit Contention 5 and Intervenors' five motions to amend and/or supplement Contention 5.⁹³

Contention 6 states that:

The improper concrete pour in 2011, discovered in the form of a 25' long void, or air space in the reconstructed area of the Davis-Besse shield building where a 2011 maintenance access had been hydrologically cut is at least the second known concrete void at the plant. This "honevcombing" problem is complicated by the contemporaneous February 2014 discovery of broken and damaged rebar in the vicinity of the void. These shield building reconstruction problems coincide with the identification of continued and expanding concrete laminar and other cracking within the walls of the plant's shield building, which was verified by a FENOC investigation during August/September 2013. These problems represent ongoing aging problems compounded and intertwined with management failures; they are unmentioned and undocumented within the DSEIS for Davis-Besse; they may be interrelated or synergistic; they each are precedented at Davis-Besse; and they must be more intensely subjected to Aging Management Plans (AMPs) than has heretofore happened. The Draft and Final SEIS documents must be reconfigured in recognition of the lax management and [Quality Assurance (QA)] failings, and the failings of the physical components of the shield building so that the true nature of

⁹⁰ *Id*.

⁹¹ See Intervenors' Motion to Admit Contention 6. Intervenors' Motion was supported by eight exhibits, seven of which were filed by e-mail on April 21, 2014 and one of which was filed via the EIE on April 22, 2014.

⁹² Motion to Admit Contention 6 (citing Staff's April 15, 2014 RAI, which is available at ADAMS Accession No. ML14097A454).

⁹³ Motion to Admit Contention 6 at 5.

these historic problems can be revealed and analyzed in the NEPA documents and in the severe accident mitigation alternatives analysis (SAMA). Relevant AMPs must be redrawn to anticipate and account for the implications or insufficient and irregular aging management of the shield building. Also, the Safety Evaluation review and overall [Safety Evaluation (SE)] Report must be rewritten to articulate modified AMPs and QA procedures which will reasonably assure that the plant can operate safely between now and April 22, 2017, and during the extended operating license period from 2017 until 2037. 94

Intervenors' state that they seek to litigate the adequacy of yet-to be submitted modifications to FENOC's Shield Building Monitoring and Structures Monitoring Program⁹⁵ and the Staff's Draft Supplemental Environmental Impact Statement (DSEIS).⁹⁶ For the reasons discussed below, Intervenors' Motion to Admit Contention 6 should be denied.

DISCUSSION

I. <u>INTERVENORS' MOTION TO ADMIT CONTENTION 6 SHOULD BE DENIED</u>

A. Intervenors' Motion to Admit Contention 6 Should Be Denied As an Untimely Request for Reconsideration of LBP-12-27 to the Extent It Attempts to Relitigate Contention 5

As Intervenors recognize, the Board rejected Intervenors' Motion to Admit Contention 5 and each motion to amend and/or supplement Contention 5 in LBP-12-27.⁹⁷ Specifically, the Board found that the admissible safety issue raised in Contention 5 was mooted by the Shield Building Monitoring AMP and that Intervenors did not raise a genuine material dispute with that

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⁹⁴ *Id.* at 25-26.

⁹⁵ *Id.* at 2 (citing anticipated modifications to those AMPs).

⁹⁶ *Id*. at 8-9

⁹⁷ Motion to Admit Contention 6 at 5-6 (citing *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), LBP-12-27, 76 NRC 583 (2012)).

AMP or FENOC's environmental report. Intervenors did not seek review of this decision⁹⁸ or file a timely motion for reconsideration.⁹⁹

Instead, Intervenors filed their Motion to Admit Contention 6 and use it to challenge the Board's ruling in LBP-12-27, nearly 16 months after the decision. But Intervenors' delay in seeking review of the Board's decision on Contention 5 makes the Board's decision final with respect to any issues shared between the rejected Contention 5 and proposed Contention 6. Thus, the Board should reject Contention 6 to the extent it relies on arguments made and rejected in LBP-12-27.

Intervenors' make numerous attempts to relitigate Contention 5 and challenge LBP-12-27. For example, Intervenors' Motion to Admit Contention 6 incorporates the filings and exhibits associated with Intervenors' Motion to Admit Contention 5 and Intervenors' five motions to amend and/or supplement Contention 5. 100 Intervenors then cite extensively to arguments made in their Contention 5 pleadings as support for Contention 6, stating that they have maintained throughout this proceeding that "Davis-Besse's future, from AMPs to SAMA analyses, requires fundamental re-evaluation." Intervenors claim that their Contention 5 claims were not given the attention they deserved, 102 were wrongly denied, 103 and that their Contention 6 claims demonstrate that Contention 5 should have been admitted.

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⁹⁸ See, e.g., 10 C.F.R. § 2.311; 10 C.F.R. § 2.341.

⁹⁹ See 10 C.F.R. § 2.323(e).

¹⁰⁰ Motion to Admit Contention 6 at 5. See *id.* ("[Intervenors] meticulously documented concerns that the proliferation of different types of cracks may have commenced in the 1970's before the plant had opened, and that their spreading and frequency of occurrence may be increasing with the passage of time.").

¹⁰¹ *Id.* at 37. See *also id.* at 2 ("The Atomic Safety and Licensing Board ("ASLB") must finally accept the proposition that FENOC may be incapable of managing Davis-Besse safely and successfully through the proposed license extension period of 2017-2037").

¹⁰² *Id.* at 5, 8, and 10 (claiming that Contention 5 was flatly denied, claims were summarily rejected, and unceremoniously dismissed, respectively).

Additionally, Intervenors claim that because of the shield building cracking discovered in August/September 2013, concrete void discovered in February 2014, and damaged rebar of February 2014, the Board was incorrect in finding that Intervenors' Contention 5 was based, in large part, on pure speculation. Moreover, Intervenors re-raise issues in their First and Third Motion to Amend Contention 5 related to the rebar. Intervenors also assert that the microcracking and radial cracking arguments raised in their Third Motion to amend were not taken seriously by the Board and foretold of the potential significance of the cracks identified in August/September 2013. Intervenors then restate their Contention 5 claims that "FENOC has not done adequate AMPs, 109 nor even root cause analyses, extents of conditions, safety significance determinations, nor corrective actions" with respect to the cracking identified in October 2011 (i.e., the subject of proposed Contention 5). Intervenors also cite back to their Motion for Admission of Contention 5 for the proposition that the December 2011 restart of the

¹⁰³ See, e.g., Motion to Admit Contention 6 at 10 (asserting that Staff and FENOC are in "sheer denial" with respect to the shield building issues).

¹⁰⁴ *Id.* at 2 ("These recent events signify the latest evidence of serious and recurring departures from quality assurance standards at Davis-Besse even as proof of FENOC's continuing misunderstanding of the source and causation of shield building cracking has emerged. The Atomic Safety and Licensing Board ("ASLB") must finally accept the proposition that FENOC may be incapable of managing Davis-Besse safely and successfully through the proposed license extension period of 2017-2037."). *See also id.* at 13 (asserting that the changes Intervenors suggested for the AMPs in Contention "might have picked up the presence of the concrete void").

¹⁰⁵ See Motion to Admit Contention 6 at 9-10. *See also id.* at 9 ("In 2012, the ASLB flayed the Intervenors for their 'speculation' about the incipient and growing problem of cracking of the shield building…").

¹⁰⁶ See, e.g., Motion to Admit Contention 6 at 10-12.

¹⁰⁷ *Id*. at 12.

¹⁰⁸ *Id*. at 12-13.

¹⁰⁹ See, e.g., Motion to Admit Contention 6 at 13 ("Intervenors unsuccessfully sought far more aggressive investigation of the 2012 AMP for the shield building..."). *Id.* (citing Intervenors' Second Motion to Amend and Supplement Contention 5 and noting that "Intervenors objected particularly in their 'Second Motion to Amend' (June 4, 2012).").

¹¹⁰ Motion to Admit Contention 6 at 13.

reactor was unsafe¹¹¹ and that the shield building cracks should be considered in the SAMA analysis. 112

Thus, it is clear that Intervenors continue to disagree with the Board's ruling in LBP-12-27, which dismissed Contention 5, as amended and/or supplemented. But Intervenors' assertions that the Board's ruling in LBP-12-27 was incorrect and their attempts to re-litigate their Contention 5 claims as support for Contention 6¹¹³ should be rejected. The Board considered each of Intervenors' motions related to Contention 5, provided an analysis under the applicable contention admissibility standards and license renewal framework, and held that Contention 5, as amended or supplemented, was inadmissible. 114 Intervenors could have filed a timely motion for reconsideration of LBP-12-27 on or before January 6, 2013¹¹⁵ but elected not to do so. An attempt to do so now, through arguments made in support of Contention 6, is improper, ¹¹⁶ untimely, ¹¹⁷ and should be rejected by the Board.

In any event, Intervenors have not met the Commission's reconsideration standards. Thus, to the extent Intervenors' instant motion could be viewed as an untimely request for

¹¹¹ *Id*. at 35.

¹¹² Motion to Admit Contention 6 at 9, 18, 23. See Intervenors' Motion to Admit Contention 5 at 3. See also id. at 10 ("The cracking and cracking-related phenomena raise valid...NEPA issues within the scope of this proceeding...").

¹¹³ See, e.g., Motion to Admit Contention 6 at 8-16 (section entitled "Intervenors' Prescient Prior Efforts to Raise The Issues of This Motion").

¹¹⁴ See generally, *Davis Besse*, LBP-12-27, 76 NRC 583 (2012).

¹¹⁵ See 10 C.F.R. § 2.323(e) ("A motion [for reconsideration] must be filed within ten (10) days of the action for which reconsideration is requested. The motion and any responses to the motion are limited to ten (10) pages."). LBP-12-27 was issued on December 28, 2012.

¹¹⁶ Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-91-39, 34 NRC 273, 284, 279-280 (1991) (providing that allegations that a Board decision is erroneous are not a proper subject of contentions).

^{117 10} C.F.R. § 2.323(e) (providing that a motion for reconsideration must be filed within ten (10) days of the action for which reconsideration is requested).

reconsideration, there is no basis for granting such relief. The regulations state that "[m]otions for reconsideration may not be filed except upon leave of the presiding officer or the Commission, upon a showing of compelling circumstances, such as the existence of a clear and material error in a decision, which could not have reasonably been anticipated, that renders the decision invalid." In sum, it is not sufficient for a movant to point to facts that were not considered by the Board in its decision; rather, those facts must establish "a clear and material error" by the Board that "renders the decision invalid." Moreover, where the facts presented by the motion were not in evidence and thus could not have been considered by the Board in its decision, they may not be relied upon as a basis for "reconsider[ing]" the decision that was rendered. 121

Intervenors have not pointed to any fact(s) not considered by the Board that establishes a clear and material error that renders LBP-12-27 invalid. Instead, Intervenors either reference the exact pleadings, arguments, and declarations the Board has already considered and rejected as out-of-scope, immaterial, and/or lacking an adequate basis or point to facts that were not in evidence when the Board issued LBP-12-27 (e.g., the cracks identified in August/September 2013, the concrete void identified in February 2014, the damaged rebar of February 2014, the May 20, 2013 declaration of Arnold Gundersen filed in a different

¹¹⁸ See Shoreham, LBP-91-39, 34 NRC at 284 n. 33.

^{119 10} C.F.R. § 2.323(e). In its Statements of Consideration for the 2004 changes to the NRC's Rules of Practice, the Commission stated that it "intended to permit reconsideration only where manifest injustice would occur in the absence of reconsideration, and the claim could not have been raised earlier. In the Commission's view, reconsideration should be an extraordinary action and should not be used as an opportunity to reargue facts and rationales which were (or should have been) discussed earlier." Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,207 (Jan. 14, 2004).

¹²⁰ 10 C.F.R. § 2.323(e).

¹²¹ *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-38, 54 NRC 490, 493 (2001) (citation omitted), *citing Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-17, 48 NRC 69, 73-74 (1998).

proceeding¹²²). As noted above, repeating arguments previously presented or pointing to facts not in evidence at the time the Board issued a decision do not present a basis for reconsideration.¹²³ Thus, Intervenors do not meet the reconsideration standards¹²⁴ and their attacks on LBP-12-27 should be rejected.

B. <u>Intervenors' Contention 6 Does Not Meet the Commission's Contention Admissibility Standards</u>

Further, Intervenors' Motion to Admit Contention 6 should be denied because proposed Contention 6 does not meet the Commission's contention admissibility standards for new or amended contentions. In this proceeding, the admissibility of a new or amended contention is governed by three sets of requirements: the Commission's general admissibility requirements for all contentions in 10 C.F.R. § 2.309(f)(1)(i)-(vi); the admissibility requirements for new or amended contentions filed after the deadline for receipt of petitions to intervene has passed in 10 C.F.R. § 2.309(f)(2)(i)-(iii); and the admissibility requirement for nontimely contentions in 10 C.F.R. § 2.309(c). 125

As discussed below, Intervenors' Contention 6 should not be admitted. First, Intervenors have not satisfied the timeliness requirements of 10 C.F.R. § 2.309(f)(2) or section 2.309(c) because they have not demonstrated that Contention 6 is based on new and materially different information or shown good cause for filing late, respectively. Second, Intervenors have not met the 10 C.F.R. § 2.309(f)(1) requirements because their proposed Contention 6: raises issues

¹²² See Exhibit 8 (ADAMS Accession No. ML14112A006).

¹²³ Nuclear Engineering Co. (Sheffield, Illinois Low-Level Radioactive Waste Disposal Site), CLI-80-1, 11 NRC 1, 5 (1980); See also Wisconsin Electric Power Co. (Point Beach Nuclear Plant Unit No. 2), 4 AEC 678, 678 (1971) (Commission finding no sound basis for reconsidering arguments made to and considered by it in a prior order). See *Private Fuel Storage*, *L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-38, 54 NRC 490, 493 (2001).

¹²⁴ Intervenors' Motion for Admission of Contention 6 also does not meet the standards for reopening a closed record as there was no initial decision with respect to Contention 5.

¹²⁵ Davis-Besse, LBP-12-27, 76 NRC at 591. See Board's Initial Scheduling Order (ISO).

that are outside the scope of this license renewal proceeding, does not raise a genuine material dispute with the license renewal application, and lacks an adequate basis.

1. <u>Intervenors Have Not Demonstrated That Contention 6 Raises New and Materially Different Information Under 10 C.F.R. § 2.309(f)(2)</u>

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 6 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 (ISO), 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. The Commission has 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." Further, the Commission has made clear that Intervenors cannot "delay filing a contention until a document becomes available that collects, summarizes and places into context the facts supporting that contention."

Intervenors base their Motion for Admission of Contention 6 on the shield building cracks identified in August/September 2013, a concrete void found in February 2014, rebar damage of February 2014. ¹²⁹ and an April 15, 2014 Staff RAI. However, Intervenors recognize that the

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¹²⁶ 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*.

¹²⁷ Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 496 (2010).

¹²⁸ Prairie Island, CLI-10-27, 72 NRC at 496 (2010).

¹²⁹ Motion to Admit Contention 6 at 22.

cracks identified in August/September 2013 are not new information under the Board's ISO.¹³⁰ Thus, any claims related to these cracks are not timely raised. Likewise, Intervenors have not demonstrated that information related to the concrete void, damaged rebar, or the Staff's April 15, 2014 RAI is new and materially different information under the Board's ISO. Therefore, Intervenors' Motion to Admit Contention 6 should be denied.

a. <u>Intervenors Do Not Demonstrate That Information On the Concrete Void is New or</u>
Materially Different Information Than Information Previously Available

Intervenors claim that they first learned of the concrete void from an NRC announcement issued on February 19, 2014. ¹³¹ However, Intervenors admit that this information was publicly available at least as early as February 15, 2014 in the *Toledo Blade*. ¹³² Intervenors provided the February 15, 2014 *Toledo Blade* article as Exhibit 2. That article describes the concrete void in the same terms described in Intervenors' Motion to Admit Contention 6 (e.g., as a large air pocket or void, ¹³³ as in the shield building's concrete and rebar wall, ¹³⁴ as being approximately 2.5 feet thick ¹³⁵). Intervenors had sufficient information on February 15, 2014 to raise their concerns about the concrete void. In accordance with the ISO, Intervenors should have filed their proposed Contention 6 no later than April 16, 2014. Intervenors provide no good cause justifying their late filing, which began on April 21, 2014 and was not completed until April

¹³⁰ For example, Intervenors' Exhibit 6 is a September 20, 2013 Preliminary Notification of Event from the NRC discussing the newly discovered shield building cracks. See Motion to Admit Contention 6 at 6, 22, and Exhibit 6. Further, Intervenors do not offer any arguments as to why these cracks are new and materially different information than information previously available.

¹³¹ Motion to Admit Contention 6 at 22. See also Exhibit 1 (including the related NRC February 19, 2014 Preliminary Notification from Region III).

¹³² See Motion Admit Contention 6 at 3 (referring to Tom Henry, "Davis-Besse Had Air Gap in Shield Building," *The Toledo Blade*, Feb. 15, 2014, *available at* http://www.toledoblade.com/Energy/2014/02/15/Davis-Besse-had-air-gap-in-shield-building.html).

¹³³ Motion to Admit Contention 6 at 3.

¹³⁴ See *id*. at 1.

¹³⁵ *Id*. at 3.

22, 2014. Thus, information on the February 2014 concrete void is not new information under the Board's ISO. 136

Moreover, Intervenors do not indicate how information related to the February 2014 concrete void is materially different than information previously available. As discussed above, alleged new and materially different information must (1) support the proposed contention, ¹³⁷ and (2) articulate a "reasonably apparent" foundation for the contention. ¹³⁸ Intervenors assert that the concrete void "materially differs from the previously-available information as to the 2011 resealing of the shield building, because the assumption was that the integrity of the structure (such as it was) was not compromised. ¹³⁹ But Intervenors do not explain or articulate how the concrete void compromised the shield building ¹⁴⁰ or how these claims relate to any license renewal decision. ¹⁴¹ Intervenors' similar arguments related to the integrity of the shield building were rejected by the Board in LBP-12-27 as raising current operating issues that are outside the scope of license renewal. ¹⁴² Since Intervenors have not demonstrated that this information is materially different than information previously available, it does not support admission of Contention 6.

¹³⁶ Intervenors' claims regarding previous concrete voids (see Motion to Admit Contention 6 at 4-5 and Exhibits 3, 4 and 5) are also untimely because they were not raised within 60 days of the event).

¹³⁷ See Prairie Island, CLI-10-27, 72 NRC at 493-494 (noting that the SER petitioners cited to as having new and materially different information did not provide support for the contention and so did not contain new or materially different information).

¹³⁸ *Id*. at 495.

¹³⁹ Motion to Admit Contention 6 at 22.

¹⁴⁰ As discussed in the Staff's PN, the shield building could have fulfilled its intended function.

¹⁴¹ Instead of indicating any license renewal issue, Intervenors' Exhibit 1 (i.e., the NRC's PN) states that (1) the void was discovered during the current steam generator replacement outage, when the plant was shut down and the shield building was not required to perform its intended function and (2) the licensee had to resolve this issue before the plant can return to service.

¹⁴² Davis-Besse, LBP-12-27, 76 NRC at 608, 609.

b. <u>Intervenors Do Not Demonstrate That Information On the Rebar Damage Is</u> Materially Different Than Information Previously Available

Intervenors have also not shown that information on the rebar damage from February 2014 is new and materially different information. Intervenors claim that they "first learned of the discovery of shield building rebar failure on March 25, 2014, from Victoria Clemons" ¹⁴³ and that they learned further new information related to the rebar in Staff's April 15, 2014 RAI. ¹⁴⁴ Even assuming *arguendo* that this was new, ¹⁴⁵ Intervenors have not demonstrated that it is materially different than information previously available.

Specifically, Intervenors do not indicate how any claimed failure or stress on the rebar suggests an aging-related issue or environmental concern associated with license renewal.

Instead, Intervenors note that a "hydro saw damaged the rebar" during the replacement of the steam generators in February 2014. Intervenors do not explain how the damaged rebar, which has been subsequently repaired, impacts license renewal or any AMP. Thus, Intervenors have not shown how the LRA is inadequate or how this information would impact the findings the Staff must make for license renewal. Because Intervenors have not shown that information on the rebar damage from February 2014 is new and materially different information than information previously available, it does not support admission of Contention 6.

¹⁴³ Motion to Admit Contention 6 at 22 and Exhibit 3.

¹⁴⁴ Motion to Admit Contention 6 at 22.

¹⁴⁵ Arguably, this information is not new because the February 15, 2014 *Toledo Blade* article, which Intervenors included as Exhibit 2, mentions the rebar damage. See Exhibit 2 ("Some of the shield building's rebar needs to be replaced. It appears to have been damaged by the cut made through the wall."). *Id.* ("There's a high level of confidence [the rebar damage] was a direct result of the hydro cut.").

¹⁴⁶ See Exhibit 3 at 8.

¹⁴⁷ The Staff is inspecting, under its reactor oversight process, a causal analysis of the broken rebar issue.

¹⁴⁸ *Davis Besse*, LBP-12-27, 76 NRC 603-604 (noting that Intervenors must demonstrate how challenge is material to the decision the NRC must make regarding FENOC's LRA).

c. Intervenors Do Not Demonstrate That the Staff's April 15, 2014 RAI Is New and Materially Different Information Than Information Previously Available

Intervenors also do not indicate how the Staff's April 15, 2014 RAI contains any materially different information than information previously available. Intervenors assert that the Staff's RAI asked FENOC "to incorporate modifications into Davis-Besse's Shield Building Monitoring Program and the Structures Monitoring Program [AMPs] 149 from the August/September 2013 discovery of expanded shield building cracking and the February 2014 discovery of broken and cracked rebar." This assertion is incorrect. 151

The Staff's April 15, 2014 RAI requested FENOC to:

- Explain, with sufficient technical detail, any modifications or enhancements that will be made to the Shield Building Monitoring Program; the Structures Monitoring Program; or other applicable AMP to account for this recent plant-specific operating experience [i.e., the cracks discovered in August/September 2013 and the February 2014 damaged rebarl
- If FENOC determines that no modifications or enhancements to the Shield Building Monitoring Program; the Structures Monitoring Program; or other applicable AMP are necessary based on the operating experience [[i.e., the cracks discovered in August/September 2013 and the February 2014 damaged rebar], explain, with sufficient technical detail, the basis for that determination. 152

In other words, the Staff's RAI asked FENOC if it planned to make any modifications or enhancements to any applicable AMPs to account for the cracking identified in August/September 2013 and the February 2014 rebar damage in the construction opening area

¹⁴⁹ FENOC's Shield Building Monitoring Program inspects existing core bore holes to manage the effects of aging on the 2011 laminar cracking. Thus, for example, if the laminar micro-cracking were to grow, the Shield Building Monitoring AMP should identify the growth.

¹⁵⁰ Motion to Admit Contention 6 at 22.

¹⁵¹ Likewise, contrary to Intervenors' claims, the RAI does not "admit" that "when the shield building was sealed shut following reactor head replacement in 2011, a stretch of the shield building wall which was 26-rebar-sections in length was not anchored to the rest of the rebar skeleton." See Motion to Admit Contention 6 at 6.

¹⁵² Exhibit 7 at page 2 (quoting the request from Staff).

for the steam generator replacement or provide a basis for not making changes.¹⁵³ It did not require changes to the LRA or even anticipate that changes are necessary.

Importantly, the fact that Staff asked an RAI does not in and of itself support an admissible contention. Asking questions and seeking additional information is an essential part of the NRC's licensing process, and it is clear that such questioning does not automatically give rise to an admissible contention. It is incumbent on the Intervenors to identify issues with the application. See 10 C.F.R. § 2.309(f)(1)(iv), (v). As the Board explained in LBP-12-27, Intervenors' challenge to the AMP must consist of more than allegations that the AMP is deficient. Intervenors must point to specific ways the AMP is inadequate or wrong. Intervenors have not done so here. Instead, they seek to re-argue challenges to the AMP rejected by the Board in LBP-12-27, make general claims that the AMPs are inadequate, and challenge the adequacy of possible future modifications. None of these arguments demonstrate that there is new and materially different information.

Further, to the extent the Staff's April 15, 2014 RAI discussed issues relating to the shield building cracks identified in August/September 2013, Intervenors should have raised their concerns before April 21, 2014. Moreover, Intervenors do not indicate how the cracks identified in August/September 2013 are materially different than the cracks identified in October 2011 or how the cracks identified in August/September 2013 indicate that any specific portion of

¹⁵³ FENOC's response to this RAI is due by July 1, 2014. The Staff does not know and will not speculate on how FENOC intends to respond to this RAI, but as noted, the Staff has not requested or required that FENOC amend any part of its application.

¹⁵⁴ See *Davis-Besse*, LBP-12-27, 76 NRC at 604-605.

¹⁵⁵ *Id*. at 585.

¹⁵⁶ *Id*.

¹⁵⁷ See, e.g., Motion to Admit Contention 6 at 13 (calling AMPs "poorly conceived"); id. at 16 (asserting that "comprehensive" testing of the shield building inner face is needed). The last changes to the Shield Building Monitoring and Structures Monitoring AMPs were made in FENOC's responses and LRA amendments dated November, 20, 2012 and February 12, 2013, respectively.

¹⁵⁸ See generally Motion to Admit Contention 6.

the existing AMPs are deficient. Thus, Intervenors have not shown that the Staff's April 15, 2014 RAI is materially different information than information previously available.

As discussed above, instead of identifying or explaining how any information was new and materially different than information previously available, Intervenors' Motion to Admit Contention 6 repeats information raised in the Contention 5 pleadings ¹⁵⁹ from more than a year ago. The Board held that Contention 5 was inadmissible and denied each of Intervenors' motions to amend and/or supplement because they did not identify new and materially different information than information previously available. Repeating these previously rejected arguments here does not indicate materially different information. Moreover, as discussed below, these claims do not support admission of Contention 6 because they do not meet 10 C.F.R. § 2.309(f)(1).

Because Intervenors do not specify how information they were aware of more than 60 days before Contention 6 was filed is materially different from information that was made publicly available within 60 days of filing Contention 6, as required by the Board's ISO, Intervenors' Motion for Admission of Contention 6 is untimely under 10 C.F.R. § 2.309(f)(2).

2. Intervenors Have Not Shown Good Cause For Untimely Filing

Further, Intervenors proposed Contention 6 should not be admitted because Intervenors do not meet the non-timely standards in 10 C.F.R. § 2.309(c). As the Board explained in LBP-12-27, a "contention that does not meet the timeliness requirements of 10 C.F.R. § 2.309(f)(2)(i)-(iii) might be admissible as a nontimely contention under 10 C.F.R. § 2.309(c)." Section 2.309(c) provides "an eight-factor balancing test to determine whether the nontimely

¹⁵⁹ *E.g.*, information on the October 2011 cracks, FENOC's Root Case and Revised Root Cause report, concerns about the December 2011 restart, claims that the Revised Root Cause Report contained materially different information, claims that the SAMA must account for the shield building cracking). For the record, and as the Staff explained in the filings associated with Contention 5 and at oral argument on Contention 5, Intervenors' claims related to the "internal calculations" of two engineers were erroneous and in any event, related to current operation, not license renewal. See Staff Affidavit of Abdul H. Sheikh (ADAMS Accession No. ML12068A094).

¹⁶⁰ Davis-Besse, LBP-12-27, 76 NRC at 593 (internal citations omitted).

contention should be admitted.¹⁶¹ Of the eight factors, the first factor -- good cause for the failure to file on time -- is afforded the most weight."¹⁶² Intervenors have the burden to demonstrate "that a balancing of the factors weighs in favor of granting the petition."¹⁶³

Intervenors state that they have "good cause" for filing Contention 6 late because Contention 6:

alleges serial failure of reconstruction of the shield building in a manner which would allow the structure to perform its intended purposes, a continuing and uncapped shield building concrete cracking phenomena, an unsolved rebar breakage and cracking problem, insufficient NEPA disclosure and the associated and repeated failures of QA which have either failed to find and avert these problems, or which have fostered them.¹⁶⁴

But this does not demonstrate good cause. Instead, Intervenors appear to be reasserting their Contention 5 claims that the shield building cracking is a significant safety issue warranting review¹⁶⁵ despite their untimeliness. But Intervenors provide no support for their assertions.¹⁶⁶ Moreover, these assertions challenge the current operation of the plant and are outside the scope of license renewal.¹⁶⁷

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¹⁶¹ *Id.* Intervenors' Motion and Staff's Answer refer to section 2.309(c) prior to the August 3, 2012 amendment to the regulations. See Amendments to Adjudicatory Process Rules and Related Requirements; Final Rule, 77 Fed. Reg. 46,561 (Aug. 3, 2012) (eliminating the eight late-filed factors and providing simplified late-filed criteria based on good cause). The parties in this proceeding did not request to amend the Board's ISO, which cites to the pre-August 2012 version of the rule. See ISO. This ISO continues to govern the conduct of this proceeding. See Notice from Board at 2 (Aug. 22, 2012) (ADAMS Accession No. ML12235A283). In any event, under both the old 2.309(c) or current 2.309(f)(2) test, the crux is whether a petitioner has shown good cause. See 77 Fed. Reg. at 46566. Intervenors have not shown good cause under either test.

¹⁶² Davis-Besse, LBP-12-27, 76 NRC at 593-594 (internal citations omitted).

¹⁶³ *Id.* at 594 (internal cites omitted).

¹⁶⁴ Motion to Admit Contention 6 at 23.

¹⁶⁵ See, e.g., Motion to Admit Contention 5 at 11.

Likewise, Intervenors offer no support for their claims that there is some deficiency in the Staff's NEPA analysis. *See id.* at 23.

¹⁶⁷ For example, claims that the cracks, concrete void, and/or rebar damage prevent the shield building from performing its intended function; claims that there is a "safety culture" problem at FENOC given QA failures. See generally, Davis-Besse, LBP-12-

Intervenors' Motion also does not make a compelling showing on the remaining § 2.309(c) factors. For example, Intervenors state that they have no other recourse to address their concerns or achieve their goals. However, Intervenors are mistaken. To the extent Intervenors have concerns about the current operation of Davis-Besse, they can file a 10 C.F.R. § 2.206 petition. The Commission has recently affirmed the validity of this process. However, Intervenors may challenge the Commission's existing rules by filing a 10 C.F.R. § 2.802 rulemaking petition. Intervenors can also submit comments on the Staff's DSEIS.

Intervenors also assert that their interests will not be represented because the other parties to this proceeding, the Staff and FENOC, "are both malefactors in the concrete void discovery. . . ; [and] in the formulation and implementation of the previous inadequate AMPs; and in thorough preparation of NEPA documents (ER and SEIS)." As an initial matter, Intervenors offer no basis to support their claims that the Staff or FENOC are "malefactors." The Board has previously cautioned the Intervenors from making unsupported claims of fraud or wrongdoing. Contrary to Intervenors' assertions, the Staff shares Intervenors' interest in assuring the safe operation of Davis-Besse and recognizes that a LRA must meet both the AEA and NEPA's requirements. The Staff continues to inspect the shield building, as well as all other

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¹⁶⁸ Motion to Admit Contention 6 at 24.

¹⁶⁹ Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-12-20, 76 NRC 437, 439-440 (2012).

¹⁷⁰ In fact, the Intervenors did file comments on the DSEIS. See, e.g., comment available at ADAMS Accession No. ML14098A026.

¹⁷¹ Motion to Admit Contention 6 at 24.

¹⁷² See, e.g., Board Order (Granting in Part and Denying in Part Motion to Strike) (Oct. 11, 2012) (ADAMS Accession No. ML12285A373).

features of the plant, to ensure it can safely operate. The Staff will not issue a renewed license unless and until it has made all of the required AEA and NEPA findings. 173

Intervenors also do not show how their interests will be affected. Instead, Intervenors allege, without support, that their "procedural rights under NEPA" will be affected if "the Final SEIS¹⁷⁴ [does not contain] a much more serious and stringent SAMA which reflects the valid assumption of competent QA management of the shield building." ¹⁷⁵ Intervenors do not show how any environmental issues are raised or how the SAMA analysis could be materially affected by QA competency. Thus, Intervenors have not demonstrated how any procedural interest under NEPA would be implicated.

With respect to factor 7, Intervenors recognize that admission of proposed Contention 6 will broaden the issues and may delay the proceeding. However, Intervenors claim that the possible delay is "the price for affording the public the opportunity to litigate questions arising from the applicant's failure to comply with QA requirements. How an oted, Intervenors do not describe how any QA management issue is related to a license renewal safety or environmental concern. Thus, Intervenors have not shown any benefit from broadening the license renewal proceeding and/or delaying the proceeding based on their claims. As discussed, most of Intervenors' claims have already been considered and rejected by the Board in LBP-12-27. Intervenors have had ample opportunity to raise their concerns and raise specific

¹⁷³ See, e.g., Calvert Cliffs Nuclear Project, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC 63, 63-65 (2012) (providing that NRC should not issue licenses affected by the Waste Confidence Decision until the remanded issues are resolved).

¹⁷⁴ Intervenors challenge should be to the Draft SEIS, but the Staff reads this to mean that the Draft SEIS is insufficient and Intervenors desire additional analysis in the Staff's FSEIS.

¹⁷⁵ Motion to Admit Contention 6 at 23.

¹⁷⁶ *Id*. at 24.

¹⁷⁷ Id

challenges to the existing AMPs and LRA. Their decision not to do so does not warrant further delay and/or broadening of the proceeding. 178

Intervenors also do not show that their proposed Contention 6 will assist in developing a sound record. Intervenors claim that Contention 6 "may reasonably be expected to assist in developing a sound record, because in the litigation of other contentions, Intervenors have capably presented evidence and argument of very complicated issues." But as the Board explained in LBP-12-27, Intervenors previous shield building contention, as amended and supplemented, was based in large part on speculation and/or arguments outside the scope of the proceeding and did not raise a genuine material dispute with the application. Intervenors' proposed Contention 6 suffers from the same flaws. Thus, Intervenors are unlikely to be able to assist in the development of a sound record.

For all of these reasons, Intervenors have not met 10 C.F.R. § 2.309(c).

II. <u>Intervenors' Proposed Contention 6 Does Not Meet the 10 C.F.R. § 2.309(f)(1)</u>
<u>Requirements</u>

Intervenors' proposed Contention 6 also does not meet the Commission's general contention admissibility standards in 10 C.F.R. § 2.309(f). Pursuant to § 2.309(f)(1), a contention must provide:

(1) a specific statement of the legal or factual issue sought to be raised; (2) a brief explanation of its basis; (3) a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and (4) sufficient information demonstrating that a genuine dispute exists with regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief. In addition, the petitioner

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¹⁷⁸ The Staff's September 3, 2013 Safety Evaluation Report (SER) will contain a new open issue on the shield building as a result of the pending response and resolution of the Staff's April 15, 2014 RAI. The Staff's current unresolved issue focuses on whether the recent plant-specific operating experience of the shield building regarding previously unidentified cracking and broken rebar could impact the AMPs credited for managing the effects of aging of the shield building during the period of extended operation. The Staff will not close that issue until it can make the required findings.

¹⁷⁹ Motion to Admit Contention 6 at 24.

must demonstrate that the issue raised in the contention is both "within the scope of the proceeding" and "material to the findings the NRC must make to support the action that is involved in the proceeding." ¹⁸⁰

"Failure to comply with any of these requirements is grounds for not admitting a contention." 181

Intervenors' proposed Contention 6, like their proposed Contention 5, makes both safety and environmental claims. As discussed below, Intervenors proposed Contention 6 should not be admitted because it: raises issues that are beyond the scope of this proceeding, does not raise a genuine material dispute with the application, and lacks an adequate basis.

- A. Contention 6 is Beyond the Scope of the Proceeding to the Extent It Challenges the Commission's Rules, Makes "Safety Culture" Claims, and Raises Current Safety Issues
 - 1. <u>Contention 6's Challenges to Table B-1 Are Outside the Scope of the Proceeding</u>

Like Contention 5, ¹⁸² Intervenors' proposed Contention 6 explicitly challenges 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 poor quality assurance management of the structural integrity of the shield building, from concrete voids, to defective rebar, to a continuing misunderstanding of the scope and extent of the unique cracking phenomenon, should negate the generic finding in this license

¹⁸¹ *Id.* at 592 (citing *South Carolina Electric & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 & n.33 (2010)).

¹⁸⁰ Davis-Besse, LBP-12-27, 76 NRC at 583 (internal citation omitted).

¹⁸² See Motion to Admit Contention 5 at 6 ("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.").

renewal case. Lousy QA at Davis-Besse has, itself, become an aging management problem. The potential for a severe accident might be implicated were the recurring concrete voids, or use of below-grade and/or damaged rebar allowed to be repeated in the closure of the shield building during this current steam generator swapout and any future, as-yet unanticipated, needs to perforate the shield building. A severe accident might follow upon expanded cracking and a minor earthquake or thermal/pressure event within the shield building. The analysis in the [Generic Environmental Impact Statement (GEIS)] for Category 2 "Severe Accidents" requires a showing "that one or more of the criteria of Category 1 cannot be met, and therefore additional plant-specific review is required." This review must include the taking into account of the possible effects that the 2011 concrete honeycombing may have had upon initiating or worsening cracking in the structure. 183

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. 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. Thus, these generic findings, codified in NRC regulations, are not subject to challenge absent a waiver of their application in a particular adjudicatory proceeding. Intervenors have not requested or been granted 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. 187 "Adjudicating

¹⁸³ Motion to Admit Contention 6 at 20-21.

¹⁸⁴ Turkey Point, CLI-01-17, 54 NRC at 11, 16.

¹⁸⁵ See Table B-1.

¹⁸⁶ 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 534, 551 (2011); *Davis-Besse*, LBP-12-27, 76 NRC at 609.

¹⁸⁷ Entergy Nuclear Vermont Yankee LLC (Vermont Yankee Nuclear Power Station), CLI-07-03, 65 NRC 13, 21 (2007) aff'd, Massachusetts v. NRC, 522 F.3d 115, 120-121, 125-127 (1st Cir. 2008). 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 556, 561 (2010) (ADAMS Accession No. ML103340280) (citing Marsh v. Or. Natural Res. Council, 490 U.S. 360, 373-374 (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

Category 1¹⁸⁸ 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."¹⁸⁹ Instead, a waiver must be submitted and granted.¹⁹⁰ Intervenors know that a waiver must be sought when challenging generic determinations in Table B-1,¹⁹¹ but have not sought a waiver or discussed in their motion how their claims would meet the NRC's stringent waiver standards.¹⁹² Therefore, this portion of Contention 6 is inadmissible.

2. Contention 6's Safety Culture Claims Are Outside the Scope of License Renewal

Despite the Board's clear ruling in LBP-12-27 that "safety culture" claims are outside the scope of license renewal, ¹⁹³ Intervenors offer multiple "safety culture" claims in support of proposed Contention 6. For example, Intervenors' state that the shield building cracking identified in August/September 2013, the concrete void discovered in February 2014, and the damaged rebar of February 2014:

take a hard look at new and significant information related to the issue. *Id. See also Exelon Generation Co., LLC* (Limerick Generating Station, Units 1 and 2) CLI-13-07, 78 NRC ____ (Oct. 31, 2013) (slip op. at 22) (ADAMS Accession No. ML13304B417).

¹⁸⁸ 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 Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559-560 (2005).

¹⁸⁹ Turkey Point, CLI-01-17, 54 NRC at 11, 16.

¹⁹⁰ *Id*.

¹⁹¹ See Intervenors' Motion to Admit Contention 5 at 5 (quoting from *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-20 64 NRC 131, 156-157 (2006) 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."); See Intervenors' Motion to Admit Contention 6 at 19 (citing same quote from *Vermont Yankee*, LBP-06-20 64 NRC at 156-157).

¹⁹² See Millstone, CLI-05-24, 62 NRC at 559-560 (citations omitted).

¹⁹³ *Davis-Besse*, LBP-12-27 76 NRC at 610-611.

join sensational events in Davis-Besse's operational history...that point to the conclusion that [Quality Assurance (QA)]¹⁹⁴ mismanagement is, itself, an aging-related feature at Davis-Besse which must be addressed as a pernicious problem because of its potential to cause further difficulties and operational dangers.¹⁹⁵

In fact, the contention itself makes "safety culture" claims. For example, Contention 6 points to "lax management and QA failings" in the context of claimed environmental ¹⁹⁶ and safety concerns. ¹⁹⁷ Further, in support of Contention 6, Intervenors claim that there have been "serial QA and management failings at Davis-Besse," ¹⁹⁸ including QA failures associated with the "Hole in the Head" incident. ¹⁹⁹ Intervenors go so far as to claim that the "public's faith in NRC regulation of FENOC's categorically lax QA management has been misplaced, and any presumption of intense regulatory scrutiny because of the cracking has, so far, been wrong." ²⁰⁰

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 and this Board has found that such "safety culture" contentions are outside the scope of license renewal, as they impermissibly raise issues that are relevant to

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¹⁹⁴ QA criteria for nuclear power plants are provided in 10 C.F.R. Pt. 50, App. B. Appendix B provides that QA "comprises all those planned and systematic actions necessary to provide adequate confidence that a structure, system, or component will perform satisfactorily in service. QA includes quality control, which comprises those quality assurance actions related to the physical characteristics of a material, structure, component, or system which provide a means to control the quality of the material, structure, component, or system to predetermined requirements."

¹⁹⁵ Motion to Admit Contention 6 at 36. See also *id*. at 29 ("QA management has become a feature which requires aging management.").

¹⁹⁶ "The Draft and Final SEIS documents must be reconfigured in recognition of the lax management and QA failings…". *Id.* at 26.

¹⁹⁷ "Also, the Safety Evaluation review and overall SE report must be rewritten to articulate modified AMPs and QA procedures which will reasonably assure that the plant can operate safely…". Motion to Admit Contention 6 at 26.

¹⁹⁸ *Id.* at 27. See also id. at 29 and 35.

¹⁹⁹ See, e.g., Motion to Admit Contention 6 at 29. *Id.* at 34-35.

²⁰⁰ *Id*. at 36.

current plant operation and are being addressed by the NRC's established and ongoing oversight activities.²⁰¹ 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." 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." 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. Thus, contrary to Intervenors' claim, the "poor management oversight of the shield building by FENOC" does not fall within the scope of this license renewal proceeding. 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.

3. <u>Contention 6 is Beyond the Scope of the Proceeding to the Extent It Raises Current Safety Issues</u>

Contention 6 is also inadmissible to the extent it raises current safety issues, as these issues are beyond the scope of a license renewal proceeding.²⁰⁶ The scope of the license renewal safety review is narrow; it is limited to "plant structures and components that will require

Motion to Admit Contention 6 at 27.

²⁰¹ See Prairie Island, CLI-10-27, 72 NRC at 484; see also Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 433-435 (2011); Davis-Besse, LBP-12-27, 76 NRC at 610-611.

²⁰² Prairie Island, CLI-10-27, 72 NRC at 490.

²⁰³ Diablo Canyon, CLI-11-11, 74 NRC at 435 (internal cites omitted, emphasis removed).

²⁰⁴ Prairie Island, CLI-10-27, 72 NRC at 491.

²⁰⁵ Motion to Admit Contention 6 at 27.

²⁰⁶ See *Davis-Besse*, LBP-12-27 76 NRC at 609 (citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 8-10 (2001)).

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."²⁰⁷ 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 [current licensing basis (CLB)] for the period of extended operation."²⁰⁸

Challenges to the adequacy of a plant's CLB, however, are beyond the scope of license renewal. The shield building is a design basis issue. Thus, while the shield building provides protection from radiation, that protection is a current operating safety issue covered under daily activities and routine inspections. If the shield building was not operable, then Davis-Besse must shutdown and correct the problem. Therefore, to the extent that Contention 6 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, 11 it is beyond the scope of this proceeding and must be rejected.

Notably, Intervenors' own statement of Contention 6 and what Contention 6 "alleges" makes clear that Contention 6 raises current safety issues. For example, proposed Contention 6 states that "the Safety Evaluation review and overall SE Report must be rewritten to articulate

²⁰⁷ Duke Energy Corp., (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-01-20, 54 NRC 211, 212 (2001). See Motion for Admission of Contention 6 at 16-17 and 27-29.

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

The AEA requires the NRC to ensure the safe operation of nuclear power plants. *Union of*

in original).

²⁰⁸ Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-456 (2010).

²⁰⁹ See Turkey Point, CLI-01-17, 54 NRC at 8-9 (stating that 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).

²¹⁰ See 10 C.F.R. § 54.30.

modified AMPs and QA procedures which will reasonably assure that the plant can operate safely between now and April 22, 2017...". Intervenors also state that Contention 6 "alleges serial failure of reconstruction of the shield building in a manner which would allow the structure to perform its intended purposes." But the operation of the plant from now through April 22, 2017 is a current operating issue, not a license renewal issue. Likewise, the ability of the shield building to perform its intended function is a current licensing issue; not an issue unique to license renewal. Similarly, Intervenors' claim that the structural integrity of the inner face rebar mat is questionable 114 is an out-of-scope current operating issue.

The Staff is actively inspecting FENOC's corrective actions regarding the shield building cracks, concrete void, and rebar issue and is evaluating any potential impacts to safety, and existing approvals. 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, concrete void, and rebar issue. Any repairs to the shield building resulting from the steam generator replacement must be done such that the shield building continues to meet its licensing basis. Thus, to the extent Intervenors claim that these shield

²¹² Motion to Admit Contention 6 at 26 (emphasis added).

²¹³ *Id*. at 23.

²¹⁴ Specifically, Intervenors claim that "[f]or several years in the 1970s, before the dome was put in place, and before the initial construction opening was closed, the inner face rebar mat and concrete were exposed to all seasons of weathering. This neglected facet of shield building history calls into question the structural integrity of the inner face rebar mat, as well." *Id.* at 16.

²¹⁵ The Staff is also considering what impact, if any, this has on a license renewal decision. See Staff's April 15, 2014 RAI (ADAMS Accession No. ML14097A454). However, as discussed further below, Intervenors have not raised a genuine material dispute with the LRA because they have not identified how, if at all, the AMPs need to be modified to account for the issues raised in Contention 6.

²¹⁶ See, e.g., 10 C.F.R. § 54.30(a) and (b).

building issues challenge the current operation of the plant, they are outside the scope of the proceeding.²¹⁷

Likewise, challenges to the adequacy of the Staff's review are beyond the scope of a license renewal proceeding. Consequently, Intervenors' claims that the Staff's oversight of the shield building issues has been "lax" is not subject to litigation in this proceeding. 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. 219

B. <u>Intervenors' Safety Claims Lack an Adequate Basis, Are Immaterial, and Do</u> Not Raise a Genuine Dispute With the Application

Even assuming Intervenors' claims were within the scope of this proceeding, Intervenors' Contention 6 should also be found inadmissible because their safety claims lack an adequate basis, are immaterial, and do not raise a genuine dispute with the application. Thus, proposed Contention 6 does not meet the requirements in 10 C.F.R. § 2.309(f)(1).

Intervenors explain that the basis of proposed Contention 6 is that "the recurring concrete void problem, cracking problem and rebar problem have or may compromise important structures and safety features at the plant" and have not been properly accounted for in the SER. ²²⁰ But Intervenors give no facts, expert support, or reasons why the shield building cracks, ²²¹ the February 2014 concrete void, or the February 2014 rebar damage impact the

²¹⁷ Turkey Point, CLI-01-17, 54 NRC at 8-10 (noting that 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 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).

²¹⁸ See id. at 8-10.

²¹⁹ See Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC427, 437 (2011).

²²⁰ Motion to Admit Contention 6 at 26-27.

²²¹ Both those identified in October 2011 and those identified in August/September 2013.

shield building's ability to perform its intended safety functions or how these issues represent possible "age-related degradation" of the shield building. Intervenors also assert that "the NRC Staff has called upon FENOC to modify [its] aging management plans for the shield building. But as discussed above, this claim is incorrect and misreads the Staff's April 15, 2014 RAI. Thus, Intervenors' claims lack an adequate basis and should be denied.

Likewise, Intervenors provide only bare assertions that the Structures and Shield Building Monitoring AMPs are inadequate. Intervenors state that the "cracking problem has proven not to be susceptible of management under AMP commitments in place since 2012" and that the AMPs must be "redrawn." But Intervenors do not identify any specific part of FENOC's LRA that is deficient. These types of unsupported assertions do not trigger an adjudicatory hearing. 226

Moreover, Intervenors do not show that their safety claims raise a material issue. To renew a license, the Commission must find that there is "reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB." As Intervenors recognize, regarding the shield building, FENOC "must demonstrate that the 'effects of aging will be adequately managed so that the intended function(s) [as defined in § 54.4] will be maintained consistent with the CLB for the period of extended operation.' "228 Intervenors have not indicated how any of their claims prevent the

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²²² Motion to Admit Contention 6 at 25

²²³ *Id.* at 27.

²²⁴ *Id*.

²²⁵ *Id*. at 26.

²²⁶ Jersey Central Power & Light Co. (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 208 (2000).

²²⁷ 10 C.F.R. § 54.29.

²²⁸ Motion to Admit Contention 6 at 28.

Staff from making the required license renewal findings. Therefore, these arguments do not raise a material issue and are inadmissible.

Intervenors also re-raise their claim that the root cause of the cracking is not and must be known. However, Intervenors do not indicate how the root cause of the cracking, the concrete void, or the rebar damage would impact the Staff's license renewal findings. The Staff's aging management review focuses on "managing the functionality of systems, structures, and components [SSCs] in the face of detrimental aging effects as opposed to identification and mitigation of aging mechanisms." Intervenors never explain why knowledge of the cracking mechanics is necessary for developing an adequate AMP based on monitoring the cracks through multiple inspections over the period of extended operation. Likewise, the root cause of the recently identified shield building cracking, concrete void, and rebar damage is irrelevant to the stated purpose of the Shield Building Monitoring AMP. Specifically, the purpose of that AMP is to "provide reasonable assurance that the existing environmental conditions will not cause aging effects that could result in a loss of component intended function." Thus, the Shield Building Monitoring AMP will inspect the cracking as it exists. In achieving this purpose, the AMP will periodically inspect the shield building "to confirm that there are no changes in the

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²²⁹ Motion to Admit Contention 6 at 2, 7, 35. Motion to Admit Contention 5 at 23, 31, and 46.

Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461, 22,488 (May 8, 1995).

²³¹ FirstEnergy Notification of Filing Related to Proposed Shield Building Cracking Contention (Apr. 5, 2012) (ADAMS Accession No. ML12097A216) (FENOC's April 5, 2012 Submittal) at Enclosure L-12-028 at Page 15 of 15(emphasis added). FENOC indicated that the "requirements of the plant-specific Shield Building Monitoring [AMP] are to be administered in conjunction with the existing Structures Monitoring Program." FENOC's April 5, 2012 Submittal at Attachment L-12-028 Page 6 of 8. As discussed, FENOC submitted a revised Shield Building Monitoring AMP on August 16, 2012 and November 20, 2012. Staff notes that the stated purpose of the revised AMP is similar to the stated purpose in the April 5, 2012 AMP. See id. at Attachment L-12-028 at Page 6 of 15. See ADAMS Accession No. ML12230A220 at Enclosure L-12-284 at Page 12 of 12 and ADAMS Accession No. ML12331A125 at Enclosure L-12-41B Page 10 of 11.

²³² Intervenors appeared to recognize this in their Contention 5 pleadings. For example, Intervenors' Third Motion to Amend and/or Supplement Contention 5 noted at page 2 that the AMP's purpose is to "to oversee and deal with the shield building's...cracking."

nature of the identified laminar cracks."²³³ In addition, other AMPs, including the Structures Monitoring AMP, are tailored to address other cracking and aging-effects.

Further, Intervenors have not raised a genuine dispute with the application because they have not indicated what portions of the LRA they dispute. The Commission has made clear that when challenging the adequacy of an analysis included in an application, it is not enough for an intervenor to merely state it is deficient. Instead, an intervenor must "indicate what is wrong with [the analysis or discussion.]" Here, Intervenors do not indicate what portion of the SER is inadequate. Instead, Intervenors claim that the "Safety Evaluation review and overall SE Report must be rewritten to articulate modified AMPs and QA procedures." ²³⁵

Finally, despite FENOC's submission of a specific AMP for the shield building, Intervenors make only general claims that the AMPs must be "redrawn." Moreover, Intervenors seek to challenge the adequacy of hypothetical AMPs, namely the Structures Monitoring and Shield Building Monitoring AMP with some uncertain "anticipated modifications." This is not a challenge to the current application. For both of these reasons, Intervenors do not raise a genuine material dispute with the application.

For all the reasons outlined above, these portions of Proposed Contention 6 are inadmissible.

²³⁷ *Id*. at 2.

²³³ FENOC's April 5, 2012 Submittal at Attachment L-12-028 Page 5 of 8. The Shield Building Monitoring AMP is described in Section B.2.43 of the LRA.

²³⁴ Progress Energy Carolinas, Inc., (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-9, 71 NRC 245, 270 (2010). See also Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-383 (2002)).

²³⁵ Motion to Admit Contention 6 at 26.

²³⁶ *Id*.

C. <u>Intervenors' Environmental Claims Lack an Adequate Basis, Are Immaterial,</u> and Do Not Raise a Genuine Dispute With the Application

Intervenors' proposed Contention 6 also raises challenges related to the Staff's DSEIS and the SAMA analysis.²³⁸ However, Intervenors environmental claims are inadmissible because they lack an adequate basis, are immaterial and fail to raise a genuine dispute with the application.

Intervenors argue that the Staff's DSEIS is inadequate because it does not analyze the implications of FENOC's repeated management failings²³⁹ with respect to the shield building cracking, concrete voids, and "substandard and/or damaged rebar."²⁴⁰ Intervenors claim that "[i]dentifying such negative events should implicate Severe Accident Mitigation Alternatives (SAMA) consideration within the DSEIS."²⁴¹ Further, Intervenors' claim that Davis-Besse's SAMA analysis is deficient because it does not account for these shield building issues.²⁴² Neither of these assertions is sufficient to support an admissible contention and, thus the Board should deny admission of these aspects of proposed Contention 6.

1. <u>Intervenors' Claims That the DSEIS Must Consider the Environmental Impacts of the Shield Building Cracks, Concrete Void, or Rebar Damage Lack an Adequate Basis</u>

First, Intervenors' assertion that the Staff's DSEIS must consider the environmental impacts of the shield building cracks, concrete void, and rebar damage is fatally vague and unsupported by any basis. The Staff's environmental review for license renewal is focused on

²⁴² *Id*. at 26.

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²³⁸ Motion to Admit Contention 6 at 26.

²³⁹ See *id*. at 17 and 18.

²⁴⁰ *Id*. at 18.

²⁴¹ *Id*.

the potential impacts of twenty additional years of operation.²⁴³ Intervenors point to nothing that is missing in the Staff'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 the shield building cracks identified in August/September 2013, the concrete void, or rebar damage had an age-related feature, ²⁴⁴ Intervenors have failed to tie these issues to any specific environmental impact. The Commission has made clear that complex connections not obvious on their face must be supported by qualified experts. ²⁴⁵ Here, Intervenors have proffered no expert, let alone an expert opinion sufficient to tie the cracks, the concrete void, and/or the rebar damage in the shield building to an environmental impact.

2. <u>Intervenors' Assertions Regarding the SAMA Analysis Are Unsupported and Do Not</u> Raise a Material Issue

The Board has previously found that Intervenors failed to provide adequate support for many of their assertions regarding SAMAs, including claims that the SAMA must account for the shield building cracks. *Davis-Besse*, LBP-11-13, 73 NRC at 555-568; LBP-12-27, 76 NRC 583 (claiming Applicant's SAMA analysis is inadequate because it did not account for the shield building cracks identified in October 2011). Intervenors' Motion to Admit Contention 6 once again makes vague unsupported claims that the SAMA analysis is inadequate.²⁴⁶

²⁴⁵ 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).

²⁴³ *Turkey Point*, CLI-01-17, 54 NRC at 11-12. Thus, contentions raising environmental issues in a license renewal proceeding are limited to those issues which are affected by license renewal and have not been addressed by rulemaking or on a generic basis.

FENOC is expected to provide a response to the Staff's April 15, 2014 RAI by July 1, 2014.

²⁴⁶ Motion to Admit Contention 6 at 26, 37. 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.* at 26.

For example, Intervenors make a generalized claim that the shield building cracks identified in August/September 2013, the concrete void discovered in February 2014, and the rebar damage of February 2014 "should implicate [the SAMA] consideration within the DSEIS." Once again, Intervenors leave it to the Board and the other parties to determine what exactly Intervenors take issue with regarding the SAMA analysis. Intervenors point to no change in the SAMA analysis conclusions that would be materially changed by addressing their speculative assertions. It is not for the Board and the parties to create a contention. ²⁴⁸

Moreover, an admissible contention must raise a material issue affecting the license renewal decision. Intervenors fail to identify a specific material issue. 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." "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."

Notably, Intervenors' SAMA claims are similar or identical to their previously rejected Contention 5 SAMA claims. Intervenors only assert that the SAMA consideration in the DSEIS

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²⁴⁷ Motion to Admit Contention 6 at 18.

²⁴⁸ Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 331 (1983).

²⁴⁹ Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009).

²⁵⁰ Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Station), CLI-10-11, 71 NRC 287, 317 (2010).

should be implicated given the shield building cracking, concrete void, and rebar damage.²⁵¹ But Intervenors do not indicate how the August/September 2013 cracks in the shield building, the concrete void, or the damaged rebar would affect the likelihood of core damage frequency or a large early release frequency. Intervenors are also silent as to how these issues might alter the cost-benefit analysis or identify a new potentially cost beneficial mitigation measure. Instead, they say that there needs to be "a much more serious and stringent SAMA²⁵² which reflects the valid assumption of competent QA management of the shield building."²⁵³ These claims do not raise a genuine material dispute.

Intervenors' claims demonstrate a misunderstanding of the purpose of the shield building and its intended function. The protection the shield building provides as a biological shield against radiation is a current operating safety issue. If the shield building was not operable, then the plant must shutdown and correct the problem to operate. See 10 C.F.R. § 54.30. Structural cracks, concrete voids, or rebar damage that do not impair the safety function of the shield building would not impact the SAMA analysis in any way. The shield building is not credited for mitigating a release in a severe accident and the SAMA analysis does not model the shield building. However, a SAMA analysis does assume that there will be containment failures and bypasses. Intervenors point to nothing that would indicate that FENOC's SAMA is unreasonable.

²⁵¹ Motion to Admit Contention 6 at 18. *Id.* at 23. In Contention 5, Intervenors' claimed that the ER was inadequate for failing to include the shield building cracks in its SAMA analysis. Motion to Admit Contention 5 at 9, 26.

²⁵² Motion to Admit Contention 6 at 14 (calling for a "more comprehensive SAMA analysis).

²⁵³ *Id*. at 23.

²⁵⁴ See NUREG/CR-2300 Vol. 1, *PRA Procedures Guide, A Guide to the Performance of Probabilistic Risk Assessments for Nuclear Power Plants* (Jan. 1983).

Thus, this portion of proposed Contention 6 should be dismissed for lacking an adequate basis, ²⁵⁵ and failing to raise a genuine material dispute. ²⁵⁶

CONCLUSION

For the reasons set forth above, the Board should deny Intervenors' Motion and find Contention 6 inadmissible.

Respectfully submitted,

Signed (electronically) by

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²⁵⁵ 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." *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2), CLI-02-17, 56 NRC 1, 8 (2002).

²⁵⁶ See Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3) ALAB-216, 8 AEC 13, 20 (1974) (finding contention inadmissible because it did not give parties to this proceeding sufficient notice of the issues sought to be litigated).

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

Pursuant to 10 C.F.R. § 2.305 (revised), I hereby certify that copies of the "NRC STAFF'S ANSWER TO MOTION FOR ADMISSION OF CONTENTION NO. 6 ON SHIELD BUILDING CONCRETE VOID, CRACKING AND BROKEN REBAR PROBLEMS" have been served upon the Electronic Information Exchange, the NRC's E-Filing System, in the above captioned proceeding, this 16th day of May, 2014.

/Signed (electronically) by/

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Date: May 16, 2014