

June 5, 2020

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
SOUTHERN NUCLEAR OPERATING CO.) Docket No. 52-025
)
(Vogtle Electric Generating Plant, Unit 3))

NRC STAFF ANSWER TO PETITION FOR LEAVE
TO INTERVENE AND REQUEST FOR HEARING

INTRODUCTION

Pursuant to 10 C.F.R. § 2.309, the staff of the U.S. Nuclear Regulatory Commission (Staff) hereby responds to “Petition for Leave to Intervene and Request for Hearing by the Blue Ridge Environmental Defense League and its chapter Concerned Citizens of Shell Bluff (collectively BREDL or Petitioner) regarding Southern Nuclear Operating Company’s (Southern, Licensee) Request for a License Amendment and Exemption for Unit 3 Auxiliary Building Wall 11 Seismic Gap Requirements, LAR-20-001” dated May 11, 2020 (Petition). For the reasons set forth in detail below, although Petitioner has demonstrated standing pursuant to 10 C.F.R. § 2.309(d), Petitioner does not present an admissible contention in accordance with the requirements of 10 C.F.R. § 2.309(f)(1). Specifically, both contentions offered by the Petitioner fail to demonstrate that the Petitioner’s concerns are within the scope of the proceeding, address an issue that is material to the findings that the NRC staff must make to disposition the License Amendment Request (LAR) at issue, and raise a genuine dispute with the Licensee on a material issue of law or fact. Accordingly, the Petition does not meet the standards of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi) and should be denied.

BACKGROUND

A. License Amendment Background

On January 23, 2020, the Staff held a Category 1 public meeting with Southern to discuss, in part, a potential license amendment request regarding the Unit 3 Auxiliary Building Wall 11 seismic gap requirements.¹ The function of the seismic gap is to “prevent interaction between the nuclear island structures and the adjacent seismic Category II structures during a seismic event.”² During this meeting, the Staff engaged in a pre-submittal discussion and provided initial feedback.³

On February 7, 2020, Southern officially submitted its “Request for License Amendment and Exemption: Unit 3 Auxiliary Building Wall 11 Seismic Gap Requirements (LAR-20-001).”⁴ Southern states that the LAR would “modify the north-south minimum seismic gap requirements above grade between the nuclear island and the annex building west of Column Line I from El. 141’ through El. 154’ in the licensing basis to accommodate construction as-built localized nonconformances.”⁵ The LAR includes departures from the plant-specific Design Control

¹ See Summary of a Public Meeting with Southern Nuclear on January 23, 2020 (Jan. 30, 2020) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20027A231) (hereinafter “Summary”); see also Public Meeting Announcement, Notice of Public Meeting with Southern Nuclear Operating Company (Nov. 18, 2019) (ADAMS Accession No. ML19322C811).

² LAR at 4.

³ See Summary at 2; see also Draft LAR for Unit 3 Auxiliary Building Wall 11 Seismic Gap Requirements (Jan. 16, 2020) (ADAMS Accession No. ML20016A445). A draft LAR is a pre-submission document provided for discussion in anticipation of a potential future submittal.

⁴ Request for License Amendment and Exemption: Unit 3 Auxiliary Building Wall 11 Seismic Gap Requirements (LAR-20-001) (Feb. 7, 2020) (ADAMS Accession No. ML20038A939) (hereinafter “LAR”).

⁵ LAR at 3. As described in the Updated Final Safety Analysis Report (UFSAR), Section 1.2.1.6.1, Plant Arrangement, “[t]he plant arrangement is comprised of five principal building structures; the nuclear island, the turbine building, the annex building, the diesel generator building, and the radwaste building.” Further, “[t]he nuclear island consists of a free-standing steel containment building, a concrete shield building, and an auxiliary building. The foundation for the nuclear island is an integral basemat which supports these buildings.” Vogtle Electric Generating Plant, Units 3 & 4, Submittal of Revision 8 to Updated Final Safety Analysis Report, Revision 7 to Tier 1, Revision 12 to Technical Requirements Manual and Revision 51 to Technical Specifications (TS) Bases, Tier 2 at 1.2-10 (ADAMS Accession No.

Document (DCD) Tier 2* and Tier 2 information in the Updated Final Safety Analysis Report (UFSAR) as well as plant-specific Tier 1 information and corresponding changes to Combined License Appendix C information.⁶

In the LAR, Southern proposes to change the current design requirement for the minimum above-grade gap “between the nuclear island and the annex building west of Column Line I from El. 141’ through El. 154’ from a 3-inch gap to a 2-1/16 inches minimum gap.”⁷ According to Southern, this distance was chosen “to bound the nonconforming measured minimum gap of 2-3/16 inches in this localized area.”⁸ Southern maintains that the change is localized and does not affect the maximum relative displacement between the roof of the nuclear island and the Annex Building, the gap below grade between the nuclear island and the Annex Building, the displacements in the east-west direction between the nuclear island and the Annex Building, or the gap above grade between the nuclear island and the Annex Building outside the area of the localized nonconformance.⁹

ML19171A096) also available on the Nuclear Regulatory Commission (NRC) public website at <https://www.nrc.gov/docs/ML1917/ML19171A096.html> (hereinafter “UFSAR”). The seismic gap at issue in this LAR is between the Annex Building and the Auxiliary Building.

⁶ LAR at 3. Specifically, the LAR would include changes to Tier 2 Appendix 2.5E Section 5.2 and Subsection 3.7.2.8.1 information, UFSAR Tier 2* Subsection 3.8.5.1 information, Tier 1 information in Inspections, tests, analyses, and acceptance criteria (ITAAC) Table 3.3-6, and corresponding changes to Combined License Appendix C information. According to NRC regulations, Tier 1 information is “the portion of the design-related information contained in the generic DCD that is approved and certified by” Appendix D of 10 C.F.R. Part 52, and Tier 2 information is “the portion of the design-related information contained in the generic DCD that is approved but not certified by” Appendix D of 10 C.F.R. Part 52. Tier 2* information “means the portion of the Tier 2 information, designated as such in the generic DCD, which is subject to the change process in Section VIII.B.6.” of 10 C.F.R. Part 52, Appendix D. 10 C.F.R. Part 52, Appendix D, Sections II.D, II.E. Departures from plant specific Tier 1 information require an exemption pursuant to 10 C.F.R. §§ 52.63(b)(1) and 52.98(f). 10 C.F.R. Part 52, Appendix D, Section VIII.A.4. The conditions under which a license amendment is required for a departure from plant specific Tier 2 information are described in 10 C.F.R. Part 52, Appendix D, Section VIII.B.5.b.

⁷ LAR at 5.

⁸ *Id.*

⁹ *See id.*

On March 10, 2020, the Nuclear Regulatory Commission (NRC) published a notice of the receipt of the LAR in the *Federal Register*.¹⁰ The notice stated that the NRC has made a proposed determination that the LAR involves no significant hazards consideration, and it sought public comment on that proposed determination.¹¹ The notice also provided an opportunity to request a hearing.¹²

On May 11, 2020, BREDL timely filed its Petition along with four member declarations (Standing Declarations) and the supporting expert declaration of Arnold Gundersen (Gundersen Declaration).¹³ The Petitioner offers the following two contentions opposing the license amendment request: 1) License Revocation for Materially False Statements and 2) Basemat, Foundation and Construction Factors Create Unacceptable Operational Risk to Public Health and Safety.¹⁴

B. Design Background

The Petitioner's contentions raise concerns about the Vogtle Unit 3 licensing basis that are unrelated to the LAR and therefore outside the scope of this proceeding.¹⁵ To illuminate the

¹⁰ See Vogtle Electric Generating Plant, Unit 3: License amendment application; opportunity to comment, request a hearing, and petition for leave to intervene, 85 Fed. Reg. 13,944 (Mar. 10, 2020).

¹¹ *Id.*

¹² *Id.*

¹³ See Petition; see also Declaration of Arnold Gundersen to Support the Petition for Leave to Intervene and Request for Hearing by the Blue Ridge Environmental Defense League Regarding Southern Nuclear Operating Company's Request for License Amendment Vogtle Unit 3 Auxiliary Building Wall 11 Seismic Gap Requirements (LAR-20-001) (May 11, 2020) (Gundersen Declaration); Declarations of Standing by R. Colclough, C. Howard, M. Stewart, and C. Utleby Supporting the Petition for Leave to Intervene and Request for Hearing by the Blue Ridge Environmental Defense League and its Chapter Concerned Citizens of Shell Bluff Regarding Southern Nuclear Operating Company's Request for a License Amendment and Exemption for Unit 3 Auxiliary Building Wall Seismic Gap Requirements, LAR 20-001 (Standing Declarations) (May 11, 2020).

¹⁴ See Petition at 8.

¹⁵ *Infra* at Discussion Section IV.

narrow scope of the LAR, the Staff in this section provides background information to clarify the issues addressed as part of the design certification for the AP1000, as incorporated into the Vogtle 3 Combined License, as well as certain site-specific design details for the Vogtle Unit 3 reactor contained in the UFSAR. In most respects, the concerns raised by the Petitioner do not relate to the changes proposed by Southern in the LAR.¹⁶ Instead, the Petitioner questions information addressed in other portions of the UFSAR and seeks to revisit prior analyses and findings without explaining how they relate to the narrow issues addressed in the LAR.

1. Seismic Gap Background for Vogtle Unit 3

The AP1000 design certification document (DCD) includes a discussion of the analyses and cases used to develop design parameters for the foundation of the nuclear island for an AP1000 reactor.¹⁷ Each plant structure is categorized based on its function during a seismic event, taking into account the maximum potential vibratory ground motion at the generic plant site.¹⁸ The Auxiliary Building and the rest of the nuclear island are considered seismic Category I structures, whereas the Annex Building and other adjacent structures are considered seismic Category II buildings.¹⁹ The minimum above grade seismic gap identified in this analysis for the nuclear island and adjoining seismic Category II buildings is 4 inches.²⁰ This

¹⁶ LAR at 3.

¹⁷ See Westinghouse AP1000 Design Control Document, Revision 19 (ADAMS Accession No. ML11171A500), also available on the NRC public website at <https://www.nrc.gov/docs/ML1117/ML11171A500.html> (hereinafter "DCD") Tier 2, Section 3.8.5, Foundations at 3.8-65; see also DCD Tier 2, Section 3.8.5.4.2, Analyses of Settlement During Construction at 3.8-68 and 3.8-69.

¹⁸ See UFSAR Tier 2, Section 3.7, Seismic Design at 3.7-1.

¹⁹ See UFSAR Tier 2, Section 3.7.2.8.1, Annex Building at 3.7-16; see also UFSAR Tier 2, Section 3.7.2 Seismic System Analysis at 3.7-7.

²⁰ See DCD Tier 2, Section 3.8.5.1, Description of the Foundations at 3.8-65.

seismic gap “provides space to prevent interaction between the nuclear island structures and the adjacent Category II structures during a seismic event.”²¹

On February 1, 2018, Southern submitted LAR 18-002 to change “the minimum gap requirement above grade in the licensing basis between the nuclear island and the annex building/turbine building from a 4 inch minimum gap to a 3 inch minimum gap.”²² The Staff approved the changes in LAR 18-002 after reviewing the analyses presented by Southern to demonstrate that there would be no adverse impact from this change to the function of the minimum seismic gap between the nuclear island and the adjacent buildings.²³

The Vogtle Unit 3 UFSAR states that buildings adjacent to the nuclear island (including the Annex Building) “are structurally separated from the nuclear island structures” by a 3-inch minimum gap above grade.²⁴ The change proposed by Southern in LAR 20-001 would specifically amend the “licensing basis between the nuclear island and the annex building west of Column Line I from El. 141’ through El. 154’ from a 3-inch gap to a 2-1/16 inches minimum gap.”²⁵

²¹ See DCD Tier 2, Section 3.8, Design of Category I Structures at 3.8-63.

²² Southern Nuclear Operating Company Vogtle Electric Generating Plant Units 3 and 4 Request for License Amendment and Exemption: Changes to the Building Gap between the Nuclear Island and Adjacent Buildings (LAR-18-002) at 4 (Feb. 1, 2018) (ADAMS Accession No. ML18032A359). This license amendment request also sought to change “the maximum relative displacement between the roof of the nuclear island and the annex building/turbine building . . . from less than 3 inches to less than 2 inches.” The maximum relative displacement refers to the potential displacement of the buildings during a seismic event. The seismic gap assures that there are no interactions between adjacent buildings, taking into account the maximum relative displacement. See UFSAR Tier 2, Section 3.8.5.1, Description of the Foundations at 3.8-66.

²³ See Safety Evaluation by the Office of New Reactors Related to Amendment Nos. 127 and 126 to the Combined License Nos. NPF-91 and NPF-92, Respectively at Section 3.0 (Jun. 25, 2018) (ADAMS Accession No. ML18120A345).

²⁴ See UFSAR Tier 2, Section 3.8.5.1, Description of Foundations at 3.8-66.

²⁵ LAR at 5.

2. Settlement Background for Vogtle Unit 3

Design specific parameters for Vogtle Unit 3, which are not being changed by LAR-20-001, address expected settlement at the Vogtle site. AP1000 DCD Section 3.8.5.4.2, Analyses of Settlement during Construction, assumes soil conditions that would result in maximum settlement as well as three different construction sequences with varying levels of stress on the nuclear foundation.²⁶ The AP1000 DCD uses these analyses “based on conservative assumptions of soil properties” to establish the bounding parameters for the nuclear island in Table 5.0-1, Site Parameters.²⁷ Specifically, this table includes settlement parameters for differential settlement across the nuclear island foundation mat, total settlement for the nuclear foundation mat, differential settlement between the nuclear island and turbine building, and differential settlement between the nuclear island and other buildings.²⁸ These parameters are incorporated as Tier 1 and Tier 2 information in the UFSAR for Vogtle Unit 3.²⁹ Section 2.5.4.10.2 of the Vogtle 3 UFSAR discusses differential settlement in detail, acknowledging that “[d]ifferential settlement under the nuclear island foundation could cause the basemat and buildings to tilt” and that “[m]uch of this settlement occurs during civil construction prior to final installation of the equipment.”³⁰ The UFSAR further states that “[d]uring construction and plant operation at a soil site, settlements would be measured and compared to the predicted

²⁶ DCD Tier 2, Section 3.8.5.4.2, Analyses of Settlement during Construction at 3.8-68 and 3.8-69.

²⁷ UFSAR Tier 2, Section 2.5.4.10.2, Settlement Analysis at 2.5-173. Southern conducted a site-specific analysis and determined it was bounded by the generic analysis. *Id.* at 2.5-174; *see also* UFSAR Tier 2, Table 2.0-201, Comparison of AP1000 DCD Site Parameters and Comparison with Vogtle Electric Generating Plant Units 3 and 4 Site Characteristics at 2.0-8; *see also* UFSAR Tier 2, Appendix 2.5E AP1000 Vogtle Site Specific Seismic Evaluation Report.

²⁸ *See* DCD, Table 5.0-1, Site Parameters at 5.0-3.

²⁹ *See* UFSAR Tier 1, Table 5.0-1 Site Parameters at 5.0-3; *see also* UFSAR Tier 2 Table 2.5-1, Limits of Acceptable Settlement without Additional Evaluation at 2.5-216.

³⁰ UFSAR Tier 2, Section 2.5.4.10.2, Settlement Analysis at 2.5-173; *see also* UFSAR Tier 2 Table 2.0-201 Comparison of AP1000 DCD Site Parameters and Comparison with Vogtle Electric Generating Plant Units 3 and 4 Site Characteristics at 2.0-8.

settlement values and any exceedances would require additional investigation.”³¹ Information used to predict settlement at the Vogtle Units 3 and 4 site was gleaned from the detailed settlement monitoring program established for the construction and operation of Vogtle Units 1 and 2.³² In LAR-20-001, Southern does not seek to change any of the parameters associated with settlement for Vogtle Unit 3, but it discusses these issues to demonstrate that the changes to the seismic gap requested in the LAR do not cause these parameters to be exceeded.³³

3. Seismic Displacement and Modeling for Category II Building Structures at Vogtle Unit 3

The UFSAR also includes parameters related to maximum relative seismic displacement, which are related to, but separate from, the changes to the seismic gap that are the subject of the LAR. The UFSAR states that “[t]he maximum relative seismic displacement between the roof of the nuclear island and the turbine and annex buildings is less than 2 inches. This results in a clearance (gap) between buildings greater than 1 inch during a seismic event.”³⁴ Section 3.7.2.8.4, Seismic Modeling and Analysis of Seismic Category II Building Structures, describes the evaluation of seismic response for Category II structures to assure that the design “does not cause unacceptable structural failure or interaction with seismic Category I items.”³⁵ This analysis in the UFSAR was performed using the System of Analysis for Soil-Structure Interaction (SASSI).³⁶ Through its LAR, Southern does not seek to change any parameters associated with seismic displacement for Vogtle Unit 3; rather, it presents an

³¹ UFSAR Tier 2 Section 2.5.4.10.2, Settlement Analysis at 2.5-173.

³² See *id.* at 2.5-174 and 2.5-175.

³³ See LAR at 8.

³⁴ UFSAR Tier 2 Section 3.8.5.4.2, Analyses of Settlement During Construction at 3.8-66.

³⁵ UFSAR Tier 2 Section 3.7.2.8.4, Seismic Modeling and Analysis of Seismic Category II Building Structures at 3.7-17.

³⁶ See *id.* at 3.7-17 – 3.7-19.

analysis consistent with the methodology in the UFSAR to demonstrate that these parameters are not exceeded.³⁷

4. Phased Construction at Vogtle Unit 3

The licensee's UFSAR also discusses the phased construction process for Vogtle Unit 3. As stated in UFSAR 3.8.5.4.2, Analyses of Settlement During Construction, "[t]he analyses account for the construction sequence, the associated time varying load and stiffness of the nuclear island structures, and the resulting settlement time history."³⁸ This phased construction described in the UFSAR is calculated to account for the potential consequences on settlement caused by construction loads.³⁹

Information about the construction progress at Vogtle Unit 3 is publicly available. Construction activities and conformance with the licensing basis are inspected by the Staff at various intervals throughout construction. Inspection reports reflecting the progress of construction and Staff's inspection findings are available on the agency's public website.⁴⁰ For example, on November 4, 2019, the Staff inspected conformance with the licensing basis for the seismic gap between the nuclear island and adjacent buildings.⁴¹ The report states:

³⁷ See LAR at 6-8.

³⁸ UFSAR Tier 2 at Section 3.8.5.4.2, Analyses of Settlement During Construction at 3.8-71.

³⁹ See *id.*

⁴⁰ See US Nuclear Regulatory Commission, List of Construction Inspection Reports (last updated May 19, 2020) <https://www.nrc.gov/reactors/new-reactors/oversight/crop/con-inspection-reports.html#vogtle>.

⁴¹ See Vogtle Electric Generating Plant Units 3 and 4 – NRC Integrated Inspection Reports 05200025/2019003, 05200026/2019003 at 22 (Nov. 4, 2019) (ADAMS Accession No. ML19309D596). The Staff inspected the seismic gap between the nuclear island and adjacent buildings in two previous inspections. See Vogtle Electric Generating Plant Units 3 and 4 – NRC Integrated Inspection Reports 05200025/2014004 and 05200026/2014004 at 38 (Nov. 7, 2014) (ADAMS Accession No. ML14311A666); see also Vogtle Electric Generating Plant Units 3 and 4 – NRC Integrated Inspection Reports 05200025/2019002, 05200026/2019002 at 43 (Aug. 7, 2019) (ADAMS Accession No. ML19220B678).

The inspectors accompanied licensee staff conducting measurements, using a standard tape, to verify that the separation between the annex building and the nuclear island was at least three inches, as required by Appendix C of the Vogtle Unit 3 COL. Specifically, the inspectors observed licensee staff measuring gaps between structural members at seven pre-selected points in accordance with as-built layout drawing SV3-4030-C0K-819000, "Verification of Seismic Gap Annex Building to Auxiliary Building Elevation 100'-0," Revision 0.⁴²

In this same report, the Staff provided the following update for the progress of construction for Vogtle Unit 3: "[t]he licensee continued construction of the auxiliary building structure from elevation 117'-6" to the roof, completed staging or setting major electrical equipment, and commenced installation of safety related raceways and cables."⁴³

DISCUSSION

I. LEGAL STANDARDS

Section 189a. of the Atomic Energy Act (AEA) requires that the Commission "grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding."⁴⁴ To be granted a hearing, the petitioner must meet the standing requirements of 10 C.F.R. § 2.309(d) and submit at least one admissible contention pursuant to 10 C.F.R. § 2.309(f).⁴⁵

A. Standing to Intervene

A request for hearing or petition for leave to intervene must demonstrate standing in accordance with 10 C.F.R. § 2.309(d). As required by § 2.309(d)(1), the petition must state:

- (i) The name, address and telephone number of the requestor or petitioner;

⁴² Vogtle Electric Generating Plant Units 3 and 4 – NRC Integrated Inspection Reports 05200025/2019003, 05200026/2019003 at 22 (Nov. 4, 2019) (ADAMS Accession No. ML19309D596) at 23.

⁴³ *Id.* at 3 (emphasis added).

⁴⁴ 42 U.S.C. § 2239(a)(1)(A).

⁴⁵ See, e.g., *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Unit 1), LBP-11-29, 74 NRC 612, 615-16 (2011).

(ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;

(iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and

(iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.

The Commission “generally place[s] the burden of setting forth a clear and coherent argument for standing on the petitioner” but does not hold a *pro se* petitioner “to the same standards of clarity and precision to which a lawyer might reasonably be expected to adhere.”⁴⁶

In evaluating whether the petitioner has shown the requisite “interest” as required by § 2.309(d)(1)(iv), the Commission uses contemporaneous judicial concepts of standing.⁴⁷ In certain cases, the Commission has adopted a proximity presumption that allows a petitioner that “lives within, or otherwise has frequent contacts with, the zone of possible harm from the nuclear reactor”⁴⁸ to establish standing without the need to make an individualized showing of injury, causation, and redressability.⁴⁹ In practice, this presumed zone of possible harm has extended approximately 50 miles from the facility in question for construction permits, operating permits, and combined licenses.⁵⁰ In other cases, the zone of presumed harm is determined on a case-by-case basis “taking into account the nature of the proposed action and the significance of the radioactive source.”⁵¹ In a license amendment case, the petitioner must demonstrate the

⁴⁶ *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 & 4), CLI-15-25, 82 NRC 389, 394 (2015) (internal quotations and citations omitted).

⁴⁷ See *id.*; see also *Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009).

⁴⁸ *Calvert Cliffs*, CLI-09-20, 70 NRC at 915.

⁴⁹ See *id.*; see also *Florida Power and Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989).

⁵⁰ See *Calvert Cliffs*, CLI-09-20, 70 NRC at 915-16.

⁵¹ *Exelon Generation Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-05-26, 62 NRC 577, 580-81 (quoting *Georgia Inst. of Tech.* (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 116-17 (2005)).

proposed action “quite ‘obvious[ly]’ entails an increased potential for offsite consequences.”⁵²

The petitioner has the burden of proving that standing requirements are met, but the hearing request will be construed in the petitioner’s favor.⁵³ And for the purposes of determining standing, the material allegations of the petition are accepted as true.⁵⁴

An organization may establish standing through representing the interests of its members (representational standing).⁵⁵ To show representational standing, the organization must show that the NRC action in the proceeding may affect at least one of its members, “must identify that member, and must demonstrate that the member has (preferably by affidavit) authorized the organization to represent him or her and to request a hearing on his or her behalf.”⁵⁶ Moreover, the represented member “must qualify for standing in his or her own right; the interests that the representative organization seeks to protect must be germane to its own purpose; and neither the asserted claim nor the requested relief must require an individual member to participate in the organization’s legal action.”⁵⁷

B. Contention Admissibility

Contention admissibility requirements are set forth in 10 C.F.R. § 2.309(f) of the Commission’s Rules of Practice. To be admissible, a newly proffered contention must satisfy the 10 C.F.R. § 2.309(f)(1) general contention admissibility requirements, which are that the contention must:

⁵² *In the Matter of Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 188 (1999) (alteration in original).

⁵³ *Turkey Point*, CLI-15-25, 82 NRC at 394.

⁵⁴ *Georgia Inst. of Tech.* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 286 (1995) (citing *Warth v. Seldin*, 422 U.S. 490, 501 (1975), and *Kelly v. Selin*, 42 F.3d 1501, 1507-08 (6th Cir. 1995)), *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, and *aff’d in part*, CLI-95-12, 42 NRC 111 (1995).

⁵⁵ *See Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 411 (2007).

⁵⁶ *Id.* at 409.

⁵⁷ *Id.*

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and
- (vi) . . . provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief . . . ⁵⁸

The 10 C.F.R. § 2.309(f)(1) requirements should “focus litigation on concrete issues and result in a clearer and more focused record for decision.”⁵⁹ The Commission has stated that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.”⁶⁰ The NRC’s contention admissibility requirements are “strict by design and intended to ensure that adjudicatory proceedings are triggered only by substantive safety or environmental issues, rooted in a reasonably specific factual or legal basis” and “to screen out ill-defined, speculative,

⁵⁸ 10 C.F.R. § 2.309(f)(1).

⁵⁹ Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,202 (Jan. 14, 2004) (final rule).

⁶⁰ *Id.*

or otherwise unsupported claims.”⁶¹ Further, “[i]n a license amendment proceeding, a petitioner's contentions must focus on the subject matter identified in the hearing notice, the amendment application, and the Staff's environmental responsibilities relating to the application.”⁶²

II. THE NRC STAFF DOES NOT OPPOSE PETITIONER'S DEMONSTRATION OF STANDING

BREDL, on behalf of the four members who submitted affidavits in support of its petition,⁶³ claims representational standing under the proximity presumption.⁶⁴ These members have authorized BREDL to represent them and their interests in the proceeding, state they live within 50 miles of Vogtle Unit 3, and cite a concern that the proposed amendment “would increase the risk to [their] health and safety.”⁶⁵ The Petition states that the declarants live “well within 25 miles of Plant Vogtle” and “some are within 5 miles.”⁶⁶ BREDL describes its organization as a “regional, community-based non-profit environmental organization” and a “watchdog’ of the environment” whose founding principles include earth stewardship and

⁶¹ *Exelon Generation Co.* (Oyster Creek Nuclear Generating Station), CLI-19-6, 89 NRC 465, 471-72 (2019).

⁶² See *U.S. Army Installation Command* (Source Materials License No. SUC-1593, Amendment 2, Davy Crockett Depleted Uranium at Various United States Army Installations) LBP-17-4, 85 NRC 225, 245 (2017) (citing *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-39, 34 NRC 273, 282 (1991)); see also *Nuclear Management Co., LLC* (Palisades Nuclear Plant), LBP-06-10, 63 NRC 314, 338, *aff'd*, CLI-06-17, 63 NRC 727 (2006) (stating “[c]ontentions are necessarily limited to issues that are germane to the application pending before the Board, and are not cognizable unless they are material to matters that fall within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's notice of opportunity for hearing”).

⁶³ See Standing Declarations.

⁶⁴ See Petition at 4-6. “[E]ach intervening participant that wishes to be a party to a proceeding must establish its own standing” and cannot simply rely on “the standing of other entities or individuals with whom it may claim to be aligned[.]” *Tennessee Valley Auth.* (Bellefonte Nuclear Plant Units 1 and 2), LBP-10-07, 71 NRC 391, 414 (2010) (internal citation omitted). However, we do not address standing for the chapter of Concerned Citizens of Shell Bluff because it does not appear it seeks party status independent of BREDL. See Petition at 3 (“BREDL and its chapters are unitary, with a common incorporation, financial structure, board of directors and executive officer”).

⁶⁵ See Standing Declarations.

⁶⁶ Petition at 5.

environmental democracy.⁶⁷ BREDL requests, among other things, that the NRC not issue the license amendment without resolution of the concerns raised in its Petition.⁶⁸ In its standing discussion, the Petitioner makes generic claims that a “catastrophic earthquake affecting Vogtle Unit 3 could reasonably create a distinct and palpable harm” and states that this injury “could be fairly traced to the conditions permitted by granting the LAR,”⁶⁹ but does not explain in this section how granting the LAR “could plausibly lead to the offsite release of radioactive fission product[.]”⁷⁰ However, elsewhere the Petition describes “seismic concerns within the basemat/foundation [that] increase the likelihood of seismic failure and meltdown” that it claims the Licensee is ignoring in its LAR.⁷¹ Considering the Petition in its entirety together with the declarations of BREDL’s members; the fact that at least one member lives within 5 miles of the site; BREDL’s status as a *pro se* petitioner; and its stated organizational purpose, the Staff does not oppose the Petitioner’s demonstration of representational standing in this proceeding through the application of the proximity presumption.⁷²

⁶⁷ *Id.* at 3.

⁶⁸ *Id.* at 17.

⁶⁹ *Id.* at 4.

⁷⁰ *Peach Bottom*, CLI-05-26, 62 NRC at 581 (quoting *Georgia Tech*, CLI-95-12, 42 NRC at 116).

⁷¹ See Petition at 16; Gundersen Declaration at 16.

⁷² In making a standing determination, “whether the petitioner is ultimately correct on the merits is a generally a distinct issue from the threshold question of standing for purposes of the proximity presumption.” See *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), LBP-16-05, 84 NRC 17, 34 (2016) (citing *Sequoyah Fuels Corp.* (Gore, Oklahoma Site Decommissioning), CLI-01-02, 53 NRC 9, 15 (2001) and *Int’l Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-02-10, 55 NRC 251, 255-56 (2002)).

III. AVAILABILITY OF INFORMATION

On May 7, 2020, the Staff received a request for information from Mr. Zeller on behalf of BREDL.⁷³ Specifically, Mr. Zeller requested the data, documents, and calculations provided by Southern to the Staff for review as part of the regulatory audit associated with LAR 20-001 as well as any “documents, data and calculations regarding the analysis performed by the NRC Audit Team members in this matter.”⁷⁴ Mr. Zeller reiterated his request in an email the following day, asserting that the Staff must provide such information under the Freedom of Information Act (FOIA).⁷⁵ As noted in the Petition, the Staff informed Mr. Zeller of the future availability of an audit report associated with the Staff review of LAR 20-001 and clarified that “[t]he NRC staff’s safety review of License Amendment Request 20-001 will rely on information placed on the docket by the licensee.”⁷⁶ The Staff also forwarded Mr. Zeller’s request to the FOIA/PA Officer, in the NRC Office of the Chief Information Officer, provided Mr. Zeller guidance on following up with his FOIA request, and provided additional information available on the NRC’s public website about FOIA.⁷⁷ Finally, the Staff provided Mr. Zeller two additional publicly available documents related to LAR 20-001.⁷⁸ The Staff’s Audit Report, dated May 26, 2020, is now

⁷³ See Email from Louis Zeller to Cayetano Santos (May 7, 2020) (ADAMS Accession No. ML20142A379). The Staff previously provided Mr. Zeller a copy of the LAR upon his request. See Email from Louis Zeller to Cayetano Santos (Apr. 22, 2020) (ADAMS Accession No. ML20142A378).

⁷⁴ See Email from Louis Zeller to Cayetano Santos (May 7, 2020) (ADAMS Accession No. ML20142A379).

⁷⁵ See Email exchange between Louis Zeller and Cayetano Santos (May 8, 2020) (ADAMS Accession No. ML20142A383).

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

available in ADAMS.⁷⁹ The Staff sent Mr. Zeller a copy of the Staff's Audit Report on May 28, 2020, once it became publicly available.⁸⁰

In its Petition, BREDL asserts that there is a lack of necessary information publicly available and seeks to reserve an opportunity to modify its contentions when certain information associated with the Staff's review becomes available. However, contentions must be based on the application and currently available information, not the Staff's review. The audit report requested by Mr. Zeller is part of the Staff's evaluation of the LAR, and "it is the license application, not the NRC staff review, that is at issue in our adjudications."⁸¹ The Staff routinely uses audits to verify information submitted on the docket by licensees and the Commission has confirmed this process "to be entirely consistent with sound regulatory practice."⁸² Further, pending Staff inquiries about licensing submittals do not necessarily indicate incompleteness and alone do not create an appropriate basis for a contention.⁸³ The Petitioner must demonstrate a genuine dispute with the application based on information available at the time the petition is filed, and cannot rely on the potential for additional Staff information to form an admissible contention.⁸⁴

⁷⁹ ADAMS Accession No. ML20141L698.

⁸⁰ See Email from Cayetano Santos to Louis Zeller (May 28, 2020) (ADAMS Accession No. ML20149K540).

⁸¹ *Baltimore Gas and Electric Co.* (Calvert Cliffs Nuclear Power Plants Units 1 and 2), CLI-98-25, 48 NRC 325, 350 (1998) (citing *Curators of the University of Missouri*, CLI-95-8, 41 NRC 386, 395 (1995)).

⁸² *Exelon Generation Co.* (Early Site Permit for Clinton ESP Site) CLI-07-12, 65 NRC 203, 208 (2007).

⁸³ See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3) CLI-08-17, 68 NRC 231, 242 (2008) (stating that "[t]he mere issuance of RAIs [Requests for Additional Information] does not mean an application is incomplete for docketing."). See also *Duke Energy Corp.* (Oconee Nuclear Station Units 1, 2, 3), CLI-99-11, 49 NRC 328, 336 (1999) (stating "[t]he NRC's issuance of RAIs does not alone establish deficiencies in the application, or that the NRC staff will go on to find any of the applicant's clarifications, justifications, or other responses to be unsatisfactory").

⁸⁴ See 10 C.F.R. § 2.309(f)(2); *Oconee*, CLI-99-11, 49 NRC at 338 (stating that "[t]he petitioners' demand that initiation of the NRC hearing process await completion of NRC staff reviews would turn our adjudicatory process on its head").

As discussed below, the Staff concludes that the Petitioner has not provided an admissible contention, and the Board should accordingly deny the Petition. If the Petitioner subsequently seeks to modify its proposed contentions based on assertedly new information, it would be required to demonstrate good cause in accordance with 10 C.F.R. § 2.309(c).

IV. THE PROPOSED CONTENTIONS ARE NOT ADMISSIBLE

The Petitioner offers two contentions, but neither meets the contention admissibility standards in 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi). The scope of the LAR at issue is narrow; it focuses on a localized reduction of the seismic gap between the nuclear island and the Annex Building. As the Staff discusses below, the Petitioner raises concerns in proposed Contention 1 and Contention 2 that are outside the scope of the proceeding, does not demonstrate how its concerns are material to a finding that the NRC must make with regards to the LAR, and fails to raise a genuine dispute with the licensee on a material issue of law or fact. Accordingly, the contentions are inadmissible.

A. Proposed Contention 1

In proposed Contention 1, BREDL asserts that the following statement in LAR 20-001 is materially false: “In order to facilitate the construction of the nuclear island and adjacent buildings....”⁸⁵ BREDL asserts, through the declaration of its expert witness, that “the construction of the walls and foundations in question were completed at least a half-decade ago, therefore, it is technically impossible to ‘facilitate construction’ on structures that were completed at least five years earlier and that fall under strict seismic regulatory guides.”⁸⁶

⁸⁵ Petition at 10.

⁸⁶ *Id.* at 11; see also Gundersen Declaration at 5, paragraph 13.1. Petitioner invokes 10 C.F.R. § 50.9, Completeness and accuracy of information, as well as Section 186, Revocation, of the Atomic Energy Act of 1954, 42 U.S.C. § 2236, and Section 206, Noncompliance, of the Energy Reorganization Act of 1974, 42 U.S.C. § 5846. As further discussed below, proposed Contention 1 is inadmissible. However, because the Petitioner’s claims could be understood as asserting potential wrongdoing by the licensee, the Staff

BREDL asserts that the conditions giving rise to the LAR (namely, the reduction in the size of the gap between the walls of the Auxiliary Building and Annex Building) are not the result of an “as-built” reduction in the gap, but movement of the walls.⁸⁷ BREDL suggests that Southern submitted the license amendment “due to the discovery that walls and the entire foundation of the Auxiliary Building have inexplicably moved, sunk and become distorted” and that Southern is “ignoring the critical underlying safety conditions that caused the gap to narrow.”⁸⁸ Finally, BREDL posits that “[t]hree possible explanations for the false statement are: 1) Westinghouse knew and did not inform SNC [Southern]; 2) Both Westinghouse and SNC [Southern] knew and did not inform NRC in a timely fashion; or 3) Westinghouse, SNC [Southern] and NRC staff knew and delayed seeking amendment of the license under an expedited schedule in order to limit scrutiny.”⁸⁹

Staff Response: Proposed Contention 1 raises concerns and seeks remedies outside the scope of this license amendment and exemption request and does not demonstrate that the issue raised in the Contention is material to the findings the NRC must make on the LAR. Moreover, it does not raise a genuine dispute with the application on a material issue of law or

will also separately follow its normal process for assessing this claim pursuant to Management Directive 8.8, “Management of Allegations” (ADAMS Accession No. ML15344A045; also available at <https://www.nrc.gov/about-nrc/regulatory/allegations-resp.html>). The NRC’s process for receiving such concerns is ordinarily non-public, in order to protect the identity of the individual and preserve the integrity of the process. In this circumstance, however, because the Petitioner identified its concerns in a public adjudicatory proceeding, the Staff determined it prudent to inform the Licensing Board of the steps it has taken. The Petitioner will receive separate correspondence from the NRC on this matter.

⁸⁷ See Petition at 11.

⁸⁸ *Id.* at 9-10.

⁸⁹ *Id.* at 11. Although proposed Contention 1 does not meet the contention admissibility standards, because the Petitioner alleges potential improper conduct or suspected wrongdoing on the part of NRC employees, the Staff referred this matter to the Office of the Inspector General. See Directive 8.8, “Management of Allegations” (ADAMS Accession No. ML15344A045; also available at <https://www.nrc.gov/about-nrc/regulatory/allegations-resp.html>) and Management Directive 7.4, Reporting Suspected Wrongdoing and Processing OIG Referrals” (ADAMS Accession No. ML18073A180; also available at <https://www.nrc.gov/reading-rm/doc-collections/management-directives/volumes/vol-7.html>).

fact. Therefore, as discussed below, proposed Contention 1 is inadmissible under the standards set forth in 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

Southern's LAR is narrow and focuses on "the north-south seismic gap requirement above grade between the nuclear island and the annex building west of Column Line I from El. 141' through El. 154."⁹⁰ The function of this gap, as identified in the Vogtle Unit 3 UFSAR, is "to prevent interaction between the nuclear island structures and the adjacent seismic Category II structures during a seismic event."⁹¹ The Petitioner's claim that the "walls and the entire foundation of the Auxiliary Building have inexplicably moved, sunk and become distorted"⁹² does not appear to pertain to the purpose or justification for the seismic gap requirement at issue. Instead, it expresses concerns with the foundation of the nuclear island, issues which are outside the scope of the license amendment and therefore do not meet 10 C.F.R. § 2.309(f)(1)(iii). Further, the Petitioner does not explain how its claims relate to the findings the Staff must make on the license amendment and exemption as required by 10 C.F.R. § 2.309(f)(1)(iv). The findings the Staff must make focus on whether the reduction of the seismic gap between the Auxiliary Building and the Annex Building in the specified area could potentially lead to interaction between the buildings during a seismic event. The Petitioner fails to demonstrate in what way its assertions about the nuclear island foundation affect the technical basis for the licensee's proposed reduction in the seismic gap.

The scope of this LAR proceeding is narrow, as set out in the associated *Federal Register* Notice, and the NRC's findings associated with the proposed action are focused on the

⁹⁰ LAR at 1.

⁹¹ See UFSAR Tier 2, Section 3.8.5.4.2, Analyses of Settlement During Construction at 3.8-66.

⁹² Petition at 9.

approval or denial of the license amendment.⁹³ The significantly broader remedy requested by the Petitioner, namely the revocation of the Vogtle 3 Combined License,⁹⁴ goes beyond the scope of a license amendment proceeding and is therefore not material to the findings the Staff must make to address this application. Proposed Contention 1, therefore, fails to meet 10 C.F.R. § 2.309(f)(1)(iii) and (iv).⁹⁵

Finally, proposed Contention 1 fails to raise a genuine dispute with the application in contravention of 10 C.F.R. § 2.309(f)(1)(vi). The Petitioner states that the LAR incorrectly identifies the cause of the seismic gap decrease as an as-built condition.⁹⁶ Specifically, the Petitioner claims that the LAR contains a false statement because “the construction of the walls and foundations in question were completed at least a half-decade ago.”⁹⁷ Publicly available information regarding the construction of Vogtle Unit 3 directly contradicts the Petitioner’s claims, and the Petitioner does not elaborate on the source of its assertion about the timing of construction.⁹⁸ Without further elaboration or explanation of how this issue is related to the

⁹³ See Vogtle Electric Generating Plant, Unit 3: License amendment application; opportunity to comment, request a hearing, and petition for leave to intervene, 85 Fed. Reg. 13,944 (Mar. 10, 2020). See Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, & 3), LBP-91-19, 33 NRC 397, 411-12 (1991), appeal denied on other grounds, CLI-91-12, 34 NRC 149 (1991); see also Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Units 2 and 3), LBP-01-10, 53 NRC 273, 339 (2001); see also *Davy Crockett*, LBP-17-4, 85 NRC at 244 (stating that “[c]ontentions are not admissible unless they are within the scope of the proceeding for which the licensing board has been delegated jurisdiction”).

⁹⁴ See Petition at 10.

⁹⁵ To the extent BREDL believes it has identified concerns that justify revocation of the license, 10 C.F.R. § 2.206(a) provides that “any person may file a request to institute a proceeding pursuant to § 2.202 to modify, suspend, or revoke a license, or for any other action as may be proper.” Information about the process for submitting a § 2.206 petition is available on the public website at <https://www.nrc.gov/about-nrc/regulatory/enforcement/petition.html>. The Staff has referred BREDL’s Petition to the NRC’s 10 C.F.R. § 2.206 coordinator in the event the Petitioner seeks to pursue such a remedy under this separate process.

⁹⁶ See Petition at 9-11.

⁹⁷ *Id.* at 11; see also Gundersen Declaration at 5, paragraph 13.1.

⁹⁸ See *supra*, Background Section B.(4), Phased Construction at Vogtle Unit 3 p. 9-10 *discussing* Vogtle Electric Generating Plant Units 3 and 4 – NRC Integrated Inspection Reports 05200025/2019003, 05200026/2019003 at 3 (Nov. 4, 2019) (ADAMS Accession No. ML19309D596) (noting construction on

NRC's determination of whether to approve the license amendment and exemption request at issue, proposed Contention 1 fails to "provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact" as required by 10 C.F.R. § 2.309(f)(1)(vi).

Therefore, for the reasons stated above, proposed Contention 1 fails to meet the contention admissibility standards of 10 C.F.R. § 2.309(f)(1). Specifically, the Petitioner fails to demonstrate that proposed Contention 1 raises issues that are within the scope of the proceeding, raises concerns material to the findings that the NRC must make, and shows that a genuine dispute exists with the licensee on a material issue of law or fact as required by 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

B. Proposed Contention 2

In proposed Contention 2, the Petitioner alleges that the basemat is "sinking" and this settlement is an unanalyzed condition that was not anticipated, and it questions whether the seismic gap is "the result of foundation problems which have plagued the construction of Vogtle 3 and 4 reactors since the very beginning of construction[.]"⁹⁹ The Petitioner also asserts that the differential deflection of the foundation is "being ignored in the current LAR"¹⁰⁰ and that the "'as-built' condition of the wall in question was correct at the time it was built."¹⁰¹ The Petitioner

the Auxiliary Building was ongoing as recently as November of 2019). *See also Shaw Areva Mox Services, LLC* (Mixed Oxide Fuel Fabrication Facility) CLI-09-02, 69 NRC 55, 65 n.47 (noting that petitioners have an obligation to assess publicly available information, especially when it is easily accessible on the NRC public website); *Duke Energy Corp* (McGuire Nuclear Station Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 386 (2002) ("Hearing petitioners have an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable the petitioner to uncover any information that could serve as the foundation for a specific contention") (internal quotations omitted)).

⁹⁹ Petition at 13-14; Gundersen Declaration at 9, 15, paragraphs 21, 36.4.

¹⁰⁰ Petition at 14.

¹⁰¹ *Id.* at 15; Gundersen Declaration at 8, paragraph 17.

further states that certain “key factors relating to the degraded condition of the nuclear island” are not addressed in the LAR.¹⁰² The Petitioner lists these key factors as: (1) the fact that the nuclear island “has settled ‘more at the center and less at the perimeter,’” (2) an assertion that a wall that Petitioner does not identify has moved closer to the nuclear island and is now unlevel and leaning, and (3) as a result of the settlement, “other systems and structures must also have become deformed yet have not been evaluated.”¹⁰³ The Petitioner argues that it has made a *prima facie* showing under 10 C.F.R. § 52.103(b), Southern has not used the correct change process, and proper notice has not been made.¹⁰⁴ The Petitioner further argues that the construction of Vogtle Unit 3 should be halted until Southern completes certain analyses and reviews and requests that the Staff not issue the LAR until these concerns are resolved.¹⁰⁵

Staff Response: Proposed Contention 2 is inadmissible under 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi) because it does not identify a genuine dispute with the application on a material issue of law or fact that is within the scope of the proceeding and material to the decision the NRC must make on the LAR. The Petitioner does not raise concerns with the requested action—a proposed localized reduction in the seismic gap between the Auxiliary Building and the Annex Building. Instead, the Petitioner makes various claims regarding settlement of the nuclear island, which, as described below, are not within the narrow scope of the LAR. Based on these claims, Petitioner states that construction of Vogtle Unit 3 should be stopped.¹⁰⁶ However, such relief is outside the scope of a license amendment and exemption proceeding,

¹⁰² Petition at 15.

¹⁰³ *Id.* at 15; see also Gundersen Declaration at 7-8, paragraph 15.

¹⁰⁴ Petition at 16, 17.

¹⁰⁵ *Id.* at 12-13, 17. The Petitioner also asserts that a component of the Staff’s review of LARs is “a review of the proposed amendment’s compatibility with the licensee’s existing design and licensing basis.” *Id.* at 14. However, the Petitioner does not explain the significance of this remark or how it otherwise supports its contention. Therefore, the Staff does not address it further in this response.

¹⁰⁶ *Id.* at 12-13.

which pertains narrowly to the grant or denial of the requested action.¹⁰⁷ Additionally, the Petitioner does not explain how its claims are material to the decision the Staff must make on the LAR.

First, contrary to Petitioner's assertions that the nuclear island was not designed or analyzed for sinking, parameters for total and differential settlement were anticipated and evaluated for Vogtle Unit 3.¹⁰⁸ Indeed, the UFSAR for Vogtle Unit 3 contains values for total and differential settlement "that are acceptable without further evaluation."¹⁰⁹ The UFSAR acknowledges that "[d]ifferential settlement under the nuclear island foundation could cause the basemat and buildings to tilt" and also states "[d]ifferential settlement of a few inches across the width of the nuclear island would not have an adverse effect on the safety-related functions of structures, systems, and components."¹¹⁰ The limit of acceptable differential settlement across the nuclear island basemat is described in the UFSAR as 1/2 inch per 50 feet, and the limit of acceptable total settlement for the nuclear island in the UFSAR is 6 inches.¹¹¹ The Licensee

¹⁰⁷ *Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), CLI-12-02, 75 NRC 63 (2012)*; see also *supra* note 95 (describing the 10 C.F.R. § 2.206 process and noting that this Petition was referred to the NRC Coordinator for 10 C.F.R. § 2.206 petitions).

¹⁰⁸ *Compare* Petition at 15; Gundersen Declaration at 9, paragraph 21 with UFSAR Tier 2, Section 2.5.4.10.2, Settlement Analysis; UFSAR Tier 2, Section 3.8.5.4.2, Analyses of Settlement During Construction; UFSAR plant-specific Tier 1 Table 5.0-1, Site Parameters at 5.0-3; UFSAR Tier 2, Table 2.5-1, Limits of Acceptable Settlement without Additional Evaluation at 2.5-216; UFSAR Tier 2, Table 2.0-201, Comparison of AP1000 DCD Site Parameters and Comparison with Vogtle Electric Generating Plant Units 3 and 4 Site Characteristics at 2.0-8.

¹⁰⁹ UFSAR Tier 2 Section 2.5.4.10.2 Settlement Analysis, at 2.5-173; see also UFSAR Tier 2 Table 2.5-1 Limits of Acceptable Settlement without Additional Evaluation, at 2.5-216; UFSAR plant-specific Tier 1 Table 5.0-1 Site Parameters; *supra* Background Section B.(2), Settlement Background for Vogtle Unit 3 pp. 7-8 (describing the settlement analyses and differential settlement parameters for Vogtle Unit 3).

¹¹⁰ UFSAR Tier 2, Section 2.5.4.10.2, Settlement Analysis at 2.5-173; see also *supra* Background Section B.(2), Settlement Background for Vogtle Unit 3 at pp.7-8 (describing the settlement analyses and differential settlement parameters for Vogtle Unit 3).

¹¹¹ See UFSAR Tier 2, Table 2.5-1 Limits of Acceptable Settlement without Additional Evaluation, at 2.5-216; UFSAR plant-specific Tier 1 Table 5.0-1, Site Parameters at 5.0-3.

does not propose to change these settlement values in its LAR.¹¹² Where a licensee seeks to modify its design, “the elements of the design that are not to be changed remain final.”¹¹³ Thus, the Petitioner does not raise a genuine dispute within the scope of this proceeding and does not raise an issue that is material to the decision the Staff must make on this license amendment as required by 10 CFR § 2.309(f)(1)(iii), (iv), and (vi).

Second, the Petitioner claims that an unidentified wall “has moved closer to the nuclear island” and “[t]hat same wall now is not level.”¹¹⁴ This may be a reference to a statement in the LAR that settlement data collected by the Licensee through 2019 “shows that the nuclear island basemat has deflected more in the center and less at the perimeter which would tend to cause the perimeter walls to lean towards the center of the nuclear island.”¹¹⁵ But as the Licensee further states, “[t]heoretically, this suggests that the nuclear island tends to tilt away from the annex building.”¹¹⁶ Also, the Licensee states that “deflection contour of the annex building is uniform in the vicinity of the nuclear island, which does not result in tilt of the perimeter structures towards the nuclear island.”¹¹⁷ The Petitioner does not contest these statements or otherwise explain the materiality of the tilting of the nuclear island perimeter walls to any finding the staff must make on this LAR. Thus, the Petitioner has not raised a genuine dispute with the

¹¹² The total and differential settlement values are provided in UFSAR plant-specific Tier 1, Table 5.0-1, Site Parameters, and plant-specific Tier 2 Tables 2.0-201, Comparison of AP1000 DCD Site Parameters and Comparison with Vogtle Electric Generating Plant Units 3 and 4 Site Characteristics, and 2.5-1, Limits of Acceptable Settlement without Additional Evaluation. Because these settlement values are in Tier 1, the Licensee would be required to seek NRC approval of any change to the values in accordance with 10 C.F.R. § 52.63 and 10 C.F.R. § 52.98(c).

¹¹³ *Southern Nuclear Operating Co. (Vogtle Electric Generating Plant Units 3 and 4)*, CLI-17-2, 85 NRC 33, 41 (2017) (citing 10 C.F.R. § 52.83(a)).

¹¹⁴ Petition at 15; Gundersen Declaration at 8.

¹¹⁵ LAR at 8.

¹¹⁶ *Id.* (emphasis added).

¹¹⁷ *Id.*

application on a material issue of law or fact and has not demonstrated that the issues are material to the findings the Staff must make on this LAR as required by 10 C.F.R.

§ 2.309(f)(1)(iv) and (vi).¹¹⁸

Third, Petitioner's claims that the unidentified "wall in question was correct at the time it was built," that it moved "without human intervention," and that "[i]ts most recent location is not an 'as-built localized nonconformance[']" are based only on its generic assertions that the nuclear island is "sinking."¹¹⁹ Specifically, the Petitioner does not explain the basis for its conclusion that the "most recent location is not an 'as-built localized nonconformance'"; a conclusory claim such as this does not support contention admissibility.¹²⁰ As discussed above, construction is phased; entire walls are not placed at one time.¹²¹ Settlement is an expected part of the construction process and was anticipated and evaluated for Vogtle Unit 3.¹²² Further, the UFSAR states that settlement is monitored continuously during all phases of construction and after construction to ensure that the limits of differential settlement described in the UFSAR are not exceeded.¹²³ Southern has not requested changes to any of the parameters associated with settlement for Vogtle Unit 3 in this LAR; rather, it provides a discussion of the observed

¹¹⁸ 10 C.F.R. § 2.309(f)(1)(iv), (vi).

¹¹⁹ Petition at 15; Gundersen Declaration at 8 paragraph 17.

¹²⁰ "[A]n expert opinion that merely states a conclusion (e.g., the application is 'deficient,' 'inadequate,' or 'wrong') without providing a reasoned basis or explanation for that conclusion is inadequate[.]" *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 457 (2006) (citation omitted).

¹²¹ See *supra* Background Section B.(4), Phased Construction at Vogtle p. 9-10 (noting that in 2019 the Auxiliary Building was still under construction).

¹²² See *supra* Background Section B.(2), Settlement Background for Vogtle Unit 3 pp. 7-8 (describing the settlement analyses and differential settlement parameters for Vogtle Unit 3).

¹²³ The Vogtle Unit 3 UFSAR describes the settlement monitoring program and states that "settlements will be monitored continuously during all construction stages to verify structural displacements due to construction loads." UFSAR Tier 2, Appendix 2.5E, AP1000 Vogtle Site Specific Seismic Evaluation Report, Section 9.0, Settlement Monitoring Program at 82-83; see also UFSAR Tier 2, Section 2.5.4.10.2.1, Displacement Monitoring at 2.5-175; UFSAR Tier 2, Section 2.5.1.2.6.1, Engineering Soil Properties and Behavior of Foundation Materials at 2.5-60.

settlement profiles through 2019 as a basis for its expectation that future settlement would not negatively impact the seismic gap.¹²⁴ The Petitioner has not contested the Licensee's statements that expected settlement would not have a negative impact on the seismic gap in the localized area described in the LAR, nor has it explained how the Petitioner's statements are material to a decision the Staff must make on the requested localized change in the seismic gap. Therefore, the Petitioner has not raised a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi) or demonstrated that its claims are material to a decision the NRC must make on the LAR as required by 10 C.F.R. § 2.309(f)(1)(iv).

Fourth, the Petitioner appears to misconstrue two separate hearing processes.¹²⁵ The Petitioner cites 10 C.F.R. § 52.103(b)—the requirements for requesting a hearing under 10 C.F.R. § 52.103(a) regarding whether the facility as constructed complies with the acceptance criteria in the combined license—as the basis for its information demonstrating a genuine dispute with the licensee on a material issue of law or fact.¹²⁶ It appears that the Petitioner is attempting to satisfy 10 C.F.R. § 52.103(b)(1) by stating it has made a *prima facie* showing “that the acceptance criteria of the ITAAC in the combined license are not capable of being met.”¹²⁷ To the extent the Petitioner seeks to raise a contention under 10 C.F.R. § 52.103(b)(1) specifically regarding the facility's conformance to ITAAC, its claim, filed May 11, is untimely. The notice required by 10 C.F.R. § 52.103(a) was published in the *Federal Register*

¹²⁴ See LAR at 8.

¹²⁵ See Petition at 16.

¹²⁶ Of note, 10 C.F.R. § 2.309(f)(1)(vi), requiring a petitioner to show a genuine dispute on a material issue of law or fact, specifically excludes proceedings under 10 C.F.R. § 52.103.

¹²⁷ Petition at 16.

on February 12, 2020 and announced an April 13, 2020 deadline for hearing requests.¹²⁸ In any event, a challenge regarding conformance to ITAAC is outside the scope of the current LAR proceeding and not material to a finding the Staff must make on the LAR as required by 10 C.F.R. § 2.309(f)(1)(iii) and (iv).

Finally, the Petitioner raises an unsupported claim that the LAR does not comply with “the process for modifying the current licensing basis for Vogtle Unit 3 as set forth in 10 CFR 52.98(f).”¹²⁹ The Petitioner further claims that the Commission has not provided “proper notice to request a hearing.”¹³⁰ These claims are without merit. As discussed above, the Licensee filed its license amendment request in accordance with the change process described in Appendix D to 10 C.F.R. part 52 as required by 10 C.F.R. § 52.98(c).¹³¹ And the March 10, 2020, *Federal Register* notice, which the Petitioner references,¹³² provided an opportunity to request a hearing and the Petitioner responded to that notice with its timely Petition.¹³³ Therefore, proposed Contention 2 does not raise a genuine dispute with the application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

For the reasons stated above, proposed Contention 2 fails to meet the contention admissibility standards of 10 C.F.R. § 2.309(f)(1). Specifically, the Petitioner fails to demonstrate that proposed Contention 2 raises issues that are within the scope of the

¹²⁸ See Vogtle Electric Generating Plant, Unit 3; Hearing Opportunity Associated with Inspections, Tests, Analyses, and Acceptance Criteria, 85 Fed. Reg. 8030, 8030-31 (Feb. 12, 2020). In any event, the Petitioner has not satisfied 10 C.F.R. § 2.309(f)(1)(vii), because the Petition’s bare assertion regarding nonconformance with unspecified ITAAC does not constitute the required *prima facie* showing, and the Petition does not “include the specific portion of the report required by 10 CFR 52.99(c) which the requestor believes is inaccurate, incorrect, and/or incomplete[.]”

¹²⁹ Petition at 17.

¹³⁰ *Id.*

¹³¹ See *supra* p. 3, note 6 (describing the change process applicable to the changes in the LAR).

¹³² See Petition at 1.

¹³³ Vogtle Electric Generating Plant, Unit 3: License amendment application; opportunity to comment, request a hearing, and petition for leave to intervene, 85 Fed. Reg. 13,944 (Mar. 10, 2020).

proceeding, shows a genuine dispute with the application on a material issue of law or fact, and raises an issue that is material to the findings the NRC must make as required by 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

CONCLUSION

For the reasons above, although the Staff does not contest BREDL's demonstration of standing in this proceeding, BREDL has not submitted an admissible contention. Accordingly, the Petition should be denied.

Respectfully submitted,

/Signed (electronically) by/

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/Executed in Accord with 10 CFR 2.304(d)/

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