UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
TENNESSEE VALLEY AUTHORITY	)	Docket Nos. 50-327-LR & 50-328-LR
	)	
(Sequoyah Nuclear Plant, Units 1 and 2)	)	
	)	
	)	

NRC STAFF ANSWER TO PETITION FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING BY THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE, BELLEFONTE EFFICIENCY AND SUSTAINABILITY TEAM, AND MOTHERS AGAINST TENNESSEE RIVER RADIATION (ERRATA)

Beth N. Mizuno
Mitzi A. Young
Brian G. Harris
Christina L. England
Counsel for NRC Staff

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(i)(1), the staff of the Nuclear Regulatory Commission ("Staff") hereby files its response to the petition for leave to intervene and request for hearing filed by Blue Ridge Environmental Defense League ("BREDL"), Bellefonte Efficiency and Sustainability Team ("BEST"), and Mothers Against Tennessee River Radiation ("MATRR") (collectively "Petitioners").[1] The Staff opposes the assertion of standing for BEST and MATRR because neither has demonstrated standing to intervene in this license renewal proceeding.

As set forth more fully below, the Staff contends that BREDL's petition to intervene and request for hearing on a contention raising Waste Confidence issues should be held in abeyance. The Staff does not oppose BREDL's assertion of standing to intervene and maintains that, with the exception of Contention B, BREDL has failed to proffer any admissible contentions. Because Contention B raises issues regarding Waste Confidence, this Board should hold that contention in abeyance in accordance with the Commission's instruction in the

[1] Petition for Leave to Intervene and Request for Hearing by the Blue Ridge Environmental Defense League, Bellefonte Efficiency and Sustainability Team, and Mothers Against Tennessee River Radiation (May 6, 2013) (Agencywide Documents Access and Management System ("ADAMS") Accession No. ML13126A403) ("Petition").

Calvert Cliffs Order.[2] The parties' hearing file and mandatory disclosure obligations should, likewise, be held in abeyance. The remaining contentions should be dismissed for failing to meet the requirements of 10 C F.R. § 2.309(f)(1).

In the following discussion, the Staff provides, first, a brief description of the background of this license renewal proceeding; second, a discussion of the assertions by BREDL, BEST, and MATRR of standing to intervene in the proceeding; and third, a discussion of the admissibility of BREDL's proposed contentions.

BACKGROUND

This proceeding concerns the January 13, 2013 application of the Tennessee Valley Authority ("TVA" or the "Applicant") to renew its operating license for the Sequoyah Nuclear Plant, Units 1 and 2 ("Sequoyah") for an additional 20 years.[3] The current operating license for Sequoyah Unit 1 expires on September 17, 2020, and the current operating license for Unit 2 expires on September 15, 2021.[4] Sequoyah is located in Hamilton County, Tennessee, on the western shore of the Chickamauga Reservoir on the Tennessee River.[5] It is approximately 18 miles northeast of Chattanooga, Tennessee.[6] Each of the Sequoyah units employs a

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[2] *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC __ (Aug. 7, 2012) (slip op. at 6).

[3] License Renewal Application, Sequoyah Nuclear Plant, Units 1 and 2, Facility Operating License Nos. DPR-77 and DPR-79 (Jan. 7, 2013) (ADAMS Accession Nos. ML13024A006, ML13024A007, ML13024A008, ML13024A009, ML13024A010, ML13024A011, ML13024A012, and ML13024A013).

[4] LRA at p. 1-1 (ADAMS Accession No. ML13024A011).

[5] *Id*. at p. 1-6.

[6] *Id.*

pressurized water reactor nuclear steam supply system with four coolant loops furnished by Westinghouse Electric Corporation.[7]

Notice of receipt of the License Renewal Application ("LRA" or "Application") was published in the *Federal Register* on February 22, 2013.[8] The NRC accepted the LRA for review and on March 5, 2013, published a Notice of Opportunity for Hearing in the *Federal Register*.[9] Requests for hearing were due on May 6, 2013.

On May 6, 2013, BREDL, BEST, and MATRR filed the instant Petition.[10]

An Atomic Safety and Licensing Board ("Board") was convened by Order, dated May 10, 2013.[11]

DISCUSSION

I. Standing to Intervene

A. Applicable Legal Requirements

Under 10 C.F.R. § 2.309(a), "[a]ny person[12] whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or

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[7] *Id.*

[8] *See* Tennessee Valley Authority; Notice of Receipt and Availability of Application for Renewal of Sequoyah Nuclear Plant, Units 1 and 2 Facility Operating License Nos. DPR-77 and DPR-79 for an Additional 20-Year Period, 78 Fed. Reg. 12,365 (Feb. 22, 2013).

[9] *See* Tennessee Valley Authority; Notice of Acceptance for Docketing of Application and Notice of Opportunity for Hearing Regarding Renewal of Sequoyah Nuclear Plant, Units 1 and 2 Facility Operating License Nos. DPR-77, DPR-79 for an Additional 20-Year Period, 78 Fed. Reg. 14,362 (Mar. 5, 2013).

[10] Petition at 27.

[11] Tennessee Valley Authority; Establishment of Atomic Safety and Licensing Board, 78 Fed. Reg. 28,897 (May 16, 2013).

[12] "Person" is defined as "(1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than the Commission . . . any State or any political subdivision of, or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and (2) any legal successor, representative, agent, or agency of the foregoing." 10 C.F.R. § 2.4.

petition for leave to intervene and a specification of the contentions which the person seeks to have litigated in the hearing." In accordance with the regulations, the Board "will grant the request/petition if it determines that the requestor/petitioner has standing under the provisions of [10 C.F.R. § 2.309(d)] and has proposed at least one admissible contention that meets the requirements of [10 C.F.R. § 2.309(f)]."[13] A request for hearing or petition for leave to intervene must state the following:

> (i) The name, address, and telephone number of the requestor or petitioner;
>
> (ii) The nature of the requestor's/petitioner's right under [the Atomic Energy Act of 1954, as amended] 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.

10 C.F.R. § 2.309(d)(1).

In license renewal proceedings, standing may be based upon a petitioner's proximity to the facility at issue such that "a petitioner is presumed to have standing to intervene without the need specifically to plead injury, causation, and redressability if the petitioner lives within 50 miles of the nuclear power reactor."[14]

An organization may establish its standing to intervene based on organizational standing (showing that its own organizational interests could be adversely affected by the proceeding), or representational standing (based on the standing of its members). Where an organization seeks to establish "representational standing," it must identify a member of the organization by

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[13] 10 C.F.R. § 2.309(a).

[14] *Entergy Nuclear Operations, Inc*. (Indian Point, Units 2 & 3), LBP-08-13, 68 NRC 43, 60 (2008) (citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-01-06, 53 NRC 138, 146 (2001), *aff'd on other grounds*, CLI-01-17, 54 NRC 3 (2001)).

name and address who would qualify for standing, show that the member has authorized the organization to represent his or her interests, and demonstrate that the interest the organization seeks to protect is germane to its own purposes.[15]

B. BREDL's Standing to Intervene

BREDL seeks representational standing. According to the regulations, the definition of "person" in 10 CFR § 2.309(a) includes public interest groups such as BREDL. In this case, 16 named members of BREDL have provided affidavits that establish that they live within 50 miles of Sequoyah Nuclear Power Plant, authorize BREDL to represent them in this proceeding, and raise concerns that are germane to BREDL's purposes.[16] Thus, the Staff does not challenge BREDL's representational standing under 10 CFR § 2.309(a) to intervene in this proceeding.

C. BEST and MATRR Have Not Demonstrated Standing to Intervene

The Petition lists BEST as a "chapter" of BREDL and lists MATRR as a "project" of BREDL. BEST and MATRR seek representational standing in this proceeding.[17] However, BEST and MATRR, in themselves or with BREDL, have failed to establish representational standing in this proceeding.

None of the affidavits indicate that the declarant is a member of either BEST or MATRR or that declarant authorizes BEST or MATRR to represent him or her in this proceeding. Moreover, to whatever extent a "chapter" or "project" may have simultaneous representational standing with its parent company, none of the affidavits submitted with the Petition make any

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[15] *See, e.g.*, *Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 409 (2007); *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), LBP-10-15, 72 NRC 257, 276 (2010).

[16] Petition at 5; Standing Declarations (Heather Bradley, Emily Marr Davis, Phil Davis, Keith Goodall, Barbara A. Kelly, Tom Kunesh, Sandra Kurtz, William Kurtz, Debra Lamb, Nicole Milsaps, Brian Paddock, Sue H. Reynolds, William Reynolds, Megan Spooner, Robert Stanley, Lauren Whaley) (ADAMS Accession No. ML13126A409).

[17] Petition at 1.

mention of BEST or MATRR or state that either BEST or MATRR is authorized to represent declarants' interests by itself or through BREDL. In *Bellefonte*, BEST similarly tried to argue that it had representational standing based on its assertion that it was "a unitary chapter of BREDL."[18] However, the Board determined in *Bellefonte* that "[b]ecause none of the affidavits submitted in support of Joint Petitioners hearing request indicate BEST represents the interests of the submitter, BEST has failed to establish it has standing."[19] In the same way, the affidavits submitted with this Petition do not authorize BEST or MATRR to represent them in the proceeding.[20] Thus, BEST and MATRR have not demonstrated that they have standing to intervene in this license renewal proceeding.

II. Admissibility of the Petitioner's Proposed Contentions

A. Legal Requirements for Contentions

1. General Requirements for Admissibility

The legal requirements governing the admissibility of contentions are well-established and set forth in 10 C.F.R. § 2.309(f) of the Commission's Rules of Practice.[21] Specifically, in order to be admitted, a contention must satisfy the following requirements:

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[18] *Tennessee Valley Authority* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC 361, 379 (2008).

[19] *Id*.

[20] *See generally* Standing Declarations (Heather Bradley, Emily Marr Davis, Phil Davis, Keith Goodall, Barbara A. Kelly, Tom Kunesh, Sandra Kurtz, William Kurtz, Debra Lamb, Nicole Milsaps, Brian Paddock, Sue H. Reynolds, William Reynolds, Megan Spooner, Robert Stanley, Lauren Whaley) (ADAMS Accession No. ML13126A409).

[21] These requirements substantially reiterate the requirements stated in former § 2.714, published in revised form in 1989. *See* Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,217 (Jan. 14, 2004); Statement of Considerations, "Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168 (Aug. 11, 1989), as corrected, 54 Fed. Reg. 39,728 (Sept. 28, 1989). Further, while § 2.714 was revised in 1989, those revisions did not constitute "a substantial departure" from then existing practice in licensing cases. 54 Fed. Reg. at 33,170-71; *see also Louisiana Energy Serv., L.P.* (Claiborne Enrichment Center), LBP-94-11, 39 NRC 205-07 (1994). Thus, while the 1989 amendments superseded, in part, the prior standards governing the

(f) Contentions. (1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:

(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 petition 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.

(2) Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report .

(footnote continued)

admissibility of contentions, those standards otherwise remained in effect to the extent they did not conflict with the 1989 amendments. *Arizona Public Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 & 3), LBP-91-19, 33 NRC 397, 400 (1991).

10 C.F.R. § 2.309(f)(1)-(2).[22]

The requirements governing the admissibility of contentions are "strict by design."[23] Thus, they have been strictly applied in NRC adjudicatory proceedings, including license renewal proceedings. For example, in the *Oyster Creek* license renewal decision, the Commission stated:

> The requirements for admissibility set out in 10 C.F.R. § 2.309(f)(1)(i)-(vi) are "strict by design," and we will reject any contention that does not satisfy these requirements. Our rules require "a clear statement as to the basis for the contentions and the submission of . . . supporting information and references to specific documents and sources that establish the validity of the contention." Mere 'notice pleading' does not suffice." Contentions must fall within the scope of the proceeding – here, license renewal – in which intervention is sought.[24]

In short, the contention admissibility rules require "a detailed, fact-based showing that a genuine and material dispute of law or fact exists."[25]

The basis requirements serve to: (1) assure that the contention raises a matter appropriate for adjudication in a particular proceeding; (2) establish a sufficient foundation for the contention to warrant further inquiry into the assertion; and (3) put other parties sufficiently

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[22] Similarly, long-standing Commission precedent establishes that contentions may only be admitted in an NRC licensing proceeding if they fall within the scope of issues set forth in the *Federal Register* notice of hearing and comply with the requirements of former § 2.714(b) (subsequently restated in § 2.309(f)) and applicable Commission case law. *See, e.g., Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2, Catawba Nuclear Power Station, Units 1 & 2), CLI-02-14, 55 NRC 278, 289-90 (2002).

[23] *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 249, 358 (2001), *petition for reconsideration denied,* CLI-02-01, 55 NRC 1 (2002).

[24] *AmerGen Energy Company, LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118-19 (2006) (footnotes omitted).

[25] *McGuire & Catawba*, CLI-02-14, 55 NRC at 289.

on notice of the issues so that they will know generally what they will have to defend against or oppose.[26] The *Peach Bottom* decision requires that a contention be rejected if:

> (1) it constitutes an attack on applicable statutory requirements;
> (2) it challenges the basic structure of the Commission's regulatory process or is an attack on the regulations;
> (3) it is nothing more than a generalization regarding the petitioner's view of what applicable policies ought to be;
> (4) it seeks to raise an issue which is not proper for adjudication in the proceeding or does not apply to the facility in question; or
> (5) it seeks to raise an issue which is not concrete or litigable.[27]

The Commission has explained that it "toughened its contention rule in a conscious effort to . . . obviate serious hearing delays caused in the past by poorly defined or supported contentions."[28] The Commission observed that prior to the revision of the rule, "[l]icensing Boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation. Indeed, in practice, intervenors could meet the rule's requirements merely by copying contentions from another proceeding involving another reactor. "[29] The petitioner in *Oconee* submitted a contention based on the fact that the Staff had requested additional information from the applicant.[30] The petitioner submitted no documents, expert opinion, or fact-based argument in support of the contention, and the *Oconee* Board ruled the contention inadmissible. In upholding the Board, the Commission wrote:

> It is surely legitimate for the Commission to screen out contentions of doubtful worth and to avoid starting down the path toward a hearing at the behest of Petitioner who themselves have no particular expertise – or

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[26] *Palo Verde*, LBP-91-19, 33 NRC at 400; *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13, 20 (1974).

[27] *Peach Bottom,* ALAB-216, 8 AEC at 20-21.

[28] *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999).

[29] *Id.* (internal quotation omitted).

[30] *Oconee*, CLI-99-11, 49 NRC at 339.

> expert assistance – and no particularized grievance, but are hoping something will turn up later as a result of NRC staff work.[31]

An expert's affidavit is not required to support every contention. The regulation governing admissibility requires an intervenor to present "a concise statement of the alleged facts or expert opinion" supporting the contention and "references to the specific sources and documents on which [the intervenor] intends to rely." 10 C.F.R. § 2.309(f)(1)(v). For some contentions, materiality, specificity, and concreteness can be demonstrated by factual analysis or documentary evidence, and no expert affidavit is required.

However, some contentions must be supported by an expert's affidavit. Where contentions are based on conclusory allegation, speculation, or opinion, and the allegation, speculation, or opinion is not supported by an expert's affidavit, those contentions have been ruled inadmissible.[32] A conclusory expert opinion will not suffice. In the *Seabrook* case, the Commission overturned the admission of a contention that relied on a conclusory expert affidavit, finding that the expert opinion "did not raise a genuine dispute with the applicant meriting litigation in this proceeding."[33] Where a contention seeks to connect a set of facts with a specific result and that result is not self-evident, expert analysis is needed to bridge the gap.[34] As the Board in *Georgia Tech* recognized, "it is the petitioner who is obligated to provide the

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[31] *Id.* at 342.

[32] *See, e.g., Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 137-139 (2004) (rejecting a contention that failed to explain how the damage it alleged would occur).

[33] *NextEra Energy Seabrook* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 320 (2012).

[34] *See*, *e.g., Nuclear Management Co., LLC* (Palisades Nuclear Plant), LBP-06-10, 63 NRC 314, 352 (2006), *aff'd* CLI-06-17, 63 NRC 727 (2006).

analyses and expert opinion showing why its bases support its contention."[35] And that obligation must be satisfied when the petition is filed because:

> [T]he mere possibility . . . that Petitioner might in the future find an expert who could provide the assistance necessary to define clearly the issues in question and effectively litigate them, does not warrant admitting the contention at this stage of the proceeding, when we must rule on such questions of admissibility based on what has been provided to this point.[36]

In addition, contentions that are based on erroneous facts, misinterpretation, or misapprehension are also inadmissible.[37] "A petitioner's imprecise reading of a reference document cannot serve to generate an issue suitable for litigation."[38] Thus, where the intervenor in the *Diablo Canyon* case asserted that mitigation measures were not addressed when, in fact, they were addressed in the applicant's environmental report, the intervenor's contention was ruled inadmissible for failure to raise a genuine dispute.[39] As the Board in the *Bellefonte* construction permit re-instatement case explained, "Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue will be dismissed."[40]

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[35] *Georgia Institute of Technology* (Georgia Tech Research Reactor), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *and affirmed in part*, CLI-95-12, 42 NRC 111 (1995).

[36] *Palisades*, LBP-06-10, 63 NRC at 352, n.152.

[37] *See, e.g., Private Fuel Storage*, CLI-4-22, 60 NRC at 136.

[38] G*eorgia Tech,* LBP-95-6, 41 NRC at 300.

[39] *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 457 (2011).

[40] *Tennessee Valley Authority* (Bellefonte Nuclear Plant, Units 1 and 2), LBP-10-7, 71 NRC 391, 421 (2010); s*ee Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994); *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

While pro se intervenors are allowed some lee-way in pleading -- so that they are not precluded from participation in adjudications based on technicalities -- pro se intervenors are still expected to meet the substantive requirements of standing and contention admissibility.[41] Furthermore, a board may not supply a basis for a petitioner, pro se or not, in order to render a contention admissible.[42]

2. The Scope of License Renewal Proceedings

The NRC's regulations in 10 C.F.R. Part 54[43] limit the scope of a license renewal proceeding to the specific matters that must be considered for the license renewal application to be granted. Pursuant to 10 C.F.R. § 54.29, the Commission considers the following standards in determining whether to grant a renewed license:

> A renewed license may be issued by the Commission up to the full term authorized by § 54.31 if the Commission finds that:
>
> (a) Actions have been identified and have been or will be taken with respect to the matters identified in Paragraphs (a)(1) and (a)(2) of this section, such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB, and that any changes made to the plant's CLB in order to comply with this paragraph are in accord with the Act and the Commission's regulations. These matters are:

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[41] *See US Army Installation Command* (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 72 NRC 185, 192 (2010); *Public Service Electric and Gas Co.* (Salem Nuclear Generating Station, Units 1 and 2), ALAB-136, 6 AEC 487 (1973); *Entergy Nuclear Vermont Yankee* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 581 (2006); *International Uranium Corp.* (White Mesa Uranium Mill), LBP-01-8, 53 NRC 204, 207-08 (2001).

[42] *See Bellefonte*, LBP-10-7, 71 NRC at 420; *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009); *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), LBP-08-26, 68 NRC 905, 917-18 (2008).

[43] *See generally* Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943 (Dec. 13, 1991) ("1991 License Renewal Rule"); Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461 (May 8, 1995) ("1995 License Renewal Rule").

(1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1); and

(2) time-limited aging analyses that have been identified to require review under § 54.21(c).

(b) Any applicable requirements of Subpart A of 10 C.F.R. Part 51 have been satisfied.

(c) Any matters raised under § 2.335 have been addressed.

These standards, along with other regulations in 10 C.F.R. Part 54, and the environmental regulations related to license renewal set forth in 10 C.F.R. Part 51 and Appendix B thereto, establish the scope of issues that may be considered in a license renewal proceeding. A proposed contention must demonstrate that the issue it raises is within the scope of the proceeding or it is subject to dismissal.[44]

The Commission has provided guidance for license renewal adjudications regarding which safety and environmental issues fall within or beyond its license renewal requirements.[45] Specifically, the Staff conducts a technical review pursuant to 10 C.F.R. Part 54 to assure that pertinent public health and safety requirements have been satisfied.[46] In addition, the Staff performs an environmental review pursuant to 10 C.F.R. Part 51 to assess the potential impacts of twenty additional years of operation.[47]

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[44] 10 C.F.R. § 2.309(f)(1)(iii); *see*, *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-05-24, 62 NRC 551, 567 (2005).

[45] *See Turkey Point*, CLI-01-17, 54 NRC at 6; *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 453-56 (2010).

[46] *See Turkey Point*, CLI-01-17, 54 NRC at 6.

[47] *Id.*

With respect to the safety review, the Commission has explained that the license renewal safety review focuses on safety questions related to plant aging.[48] Reviewing all safety issues would be duplicative, unnecessary, and wasteful because, the Commission noted, such "safety issues were thoroughly reviewed when the facility was first licensed, and now are routinely monitored and assessed by ongoing agency oversight and agency-mandated licensee programs."[49] Regardless of whether or not a license renewal application has been filed for a facility, the NRC 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.[50] Therefore, for license renewal, the Commission has found it unnecessary to include a review of issues already monitored and reviewed in ongoing regulatory oversight processes.[51] This includes "safety matters pertaining to severe accident mitigation [which] are assessed on an ongoing basis through the NRC's regulatory oversight functions[.]"[52]

The regulation in 10 C.F.R. § 54.30(b) that identifies "[m]atters not subject to a renewal review" explicitly removes compliance issues from the license renewal review. The regulation states:

> (a) If the reviews required by § 54.21(a) or (c) show that there is not reasonable assurance during the current license term that licensed activities will be conducted in accordance with the CLB, then the licensee shall take measures under its current license, as appropriate, to ensure that the intended function of those systems,

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[48] *Id.* at 7.

[49] *Id.*

[50] *Turkey Point*, CLI-01-17, 54 NRC at 8.

[51] *Id.* at 8-10.

[52] *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-12-15, 75 NRC 704, 707 (2012).

structures or components will be maintained in accordance with the CLB throughout the term of its current license.

(b) The licensee's compliance with the obligation under Paragraph (a) of this section to take measures under its current license is not within the scope of the license renewal review.

When the Commission promulgated this regulation, it explained that it was doing so "to distinguish between those issues identified during the license renewal process that require resolution during the license renewal process and those issues that require resolution during the current license term."[53] Even prior to the promulgation of 10 C.F.R. § 54.30, the Commission made it clear that "license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to ongoing compliance oversight activity."[54]

Accordingly, contentions that raise compliance issues are inadmissible as they raise issues beyond the scope of license renewal adjudication.[55] In *Prairie Island*, the Commission rejected a contention that asserted that the applicant's history of non-compliance demonstrated a poor safety culture and that the deficient safety culture would not support a finding of reasonable assurance that the applicant would manage the effects of aging during the period of extended operations.[56] The Commission noted that the contention raised "operational issues that are already addressed by existing NRC regulatory processes."[57] The Commission wrote, "We specifically indicated that other broad-based issues akin to safety culture – such as

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[53] 1995 License Renewal Rule, 60 Fed. Reg. at 22,463.

[54] 1991 License Renewal Rule, 56 Fed. Reg. at 64,952.

[55] *See, e.g., NextEra Energy Seabrook, Inc.* (Seabrook Station, Unit 1), LBP-11-2, 73 NRC 28, 56 (2011), *affirmed in part*, *reversed in part*, CLI-12-5, 75 NRC 301 (2012).

[56] *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 490-93 (2010).

[57] *Id*. at 490.

operational history, quality assurance, quality control, management competence, and human factors – were beyond the bounds of a license renewal proceeding."[58]

Furthermore, the Commission has stated that "[a]djudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review; for our hearing process (like our Staff's review) necessarily examines only the [safety] questions our safety rules make pertinent."[59] Thus, contentions raising compliance issues are barred from license renewal adjudications: they are beyond the scope of the Staff's license renewal review and they are beyond the scope of license renewal adjudication.

In the Statement of Considerations that accompanied the 1995 License Renewal Rule, the Commission noted that it had relied on an important principle for license renewal in the past:

> [that] with the exception of age-related degradation unique to license renewal and possibly a few other issues related to safety only during the period of extended operation of nuclear power plants, the regulatory process is adequate to ensure that the licensing bases of all currently operating plants provides and maintains an acceptable level of safety so that operation will not be inimical to public health and safety or common defense and security.[60]

In discussing this principle, the Commission explained that its "consideration of the range of issues relevant only to extended operation led the Commission to conclude that the detrimental effects of aging is probably the only issue generally applicable to all plants."[61] The Commission determined that "if the regulatory process is modified to address age-related

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[58] *Id*. at 491.

[59] *Turkey Point*, CLI-01-17, 54 NRC at 10.

[60] 1995 License Renewal Rule, 60 Fed. Reg. at 22,464.

[61] *Id.*

degradation that is of unique relevance to license renewal," continuing the regulatory process will ensure an acceptable level of safety.[62]

Because the Commission has determined that it can rely on existing regulatory processes to ensure the current licensing basis is maintained, the current licensing basis is not subject to challenge in a license renewal proceeding.[63] Thus, the Commission affirmed a Board decision in *Turkey Point* that denied a contention that challenged a plant's current licensing basis. The Commission wrote, "the [contention's] claims go to the adequacy of the plant's current licensing basis, which is not within the scope of the license renewal review."[64]

Contentions raising environmental issues in a license renewal proceeding are similarly limited to those issues that are affected by license renewal and have not been addressed by rulemaking or on a generic basis.[65] In 10 C.F.R. Part 51, the Commission divided the environmental requirements for license renewal into generic and plant-specific components.[66] The Generic Environmental Impact Statement ("GEIS") contains "Category 1" issues for which the NRC has reached generic conclusions.[67] Applicants for license renewal do not need to submit analyses of Category 1 issues in their Environmental Reports but instead may reference and adopt the generic findings.[68] Applicants, however, must provide a plant-specific review of

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[62] *Id.*

[63] *See, e.g., Turkey Point*, CLI-01-17, 54 NRC at 23.

[64] *Id.*; *see also Oyster Creek*, CLI-09-7, 69 NRC at 272 n.209.

[65] *See, e.g., Turkey Point*, CLI-01-17, 54 NRC at 11-13.

[66] *Id.* at 11.

[67] *Id.; see* NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Final Report, (May 1996) (ADAMS Accession No. ML040690705) ("GEIS"); *Diablo Canyon*, CLI-11-11, 74 NRC at 444-45.

[68] *Id.*

the non-generic “Category 2” issues.[69] Category 1 issues "are not subject to site-specific review and thus fall beyond the scope of individual license renewal proceedings."[70]

The Commission reiterated this principle and specified that the GEIS Category 1 conclusions generally may not be challenged in a license renewal proceeding:

> In 1996, the Commission amended the environmental review requirements in 10 C.F.R. Part 51 to address the scope of environmental review for license renewal applications. The regulations divide the license renewal environmental review into generic and plant-specific issues. The generic impacts of operating a plant for an additional 20 years that are common to all plants, or to a specific subgroup of plants, were addressed in a 1996 GEIS. Those generic impacts analyzed in the GEIS are designated ”Category 1” issues. A license renewal applicant is generally excused from discussing Category 1 issues in its environmental report. Generic analysis is "clearly an appropriate method" of meeting the agency’s statutory obligations under NEPA.
>
> The license renewal GEIS determined that the environmental effects of storing spent fuel for an additional 20 years at the site of nuclear reactors would be ”not significant.” Accordingly, this finding was expressly incorporated into Part 51 of our regulations. Because the generic environmental analysis was incorporated into a regulation, the conclusions of that analysis may not be challenged in litigation unless the rule is waived by the Commission for a particular proceeding or the rule itself is suspended or altered in a rulemaking proceeding.[71]

Thus, absent a waiver, GEIS Category 1 issues are not within the scope of review in license renewal proceedings.

B. Contention Admissibility

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[69] *Id.*

[70] *Id.* at 12; see 10 C.F.R. § 51.53(c)(3)(i)-(ii). In *Turkey Point*, the Commission recognized that “even generic findings sometimes need revisiting in particular contexts. . . . In the hearing process, for example, Petitioner with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule." *Turkey Point*, CLI-01-17, 54 NRC at 12.

[71] *Vermont Yankee and Pilgrim*, CLI-07-3, 65 NRC at 17 (footnotes omitted), *reconsid. denied*, CLI-07-13, 65 NRC 211, 214 (2007).

1. Contention A

In Contention A, BREDL states:

> TVA's LRA Fails to Adequately Address the Risks from Flooding at Sequoyah which could result from the failure of upstream dams. The consequences of such an event on the plant would be severe.[72]

In support of its contention, BREDL cites six preliminary findings from a Nuclear Regulatory Commission Inspection Report letter from the NRC to TVA issued March 12, 2013, noting "one finding and two Apparent Violations (AV) associated with the site flood mitigation strategy."[73] BREDL asserts, without citation or corroborating data, that "TVA's updated calculations showed flooding at Sequoyah could rise 2.4 feet higher than that plant was designed to handle" and that "[e]arlier assumptions were based on decades-old data which underestimated the potential severity of flooding."[74] BREDL argues that "TVA's remedy, sand and gravel baskets placed on upstream riverbanks, are stopgaps. More substantial measures for TVA's nuclear fleet would cost tens of millions of dollars, and flood-proof modifications could top a billion dollars."[75] BREDL then discusses the March 2011 incident at the Fukushima Dai-ichi Nuclear Power Plant and an NRC Order[76] issued in response to Fukushima to support its assertion that "TVA has not implemented necessary precautions to prevent similar disaster in the Tennessee Valley."[77]

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[72] Petition at 9-10.

[73] *Id*. at 11.

[74] *Id*.

[75] *Id*.

[76] Order Number EA-12-049 "Order Modifying Licenses With Regard to Requirements for Mitigation Strategies For Beyond-Design-Basis External Events" to "All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status," March 12, 2012 (ADAMS Accession No. ML12054A736).

[77] Petition at 11-12.

BREDL also cites the regulation in 10 C.F.R. § 54.30(a) and appears to suggest that the integrated plant assessment required by 10 C.F.R. § 52.21 shows that there is a lack of reasonable assurance that licensed activities will be conducted in accordance with the current licensing basis and that, therefore, action on the part of the licensee is required to ensure that the intended function of systems, structures, and components will be maintained during the term of the current license.[78]

For the reasons discussed below, Contention A is inadmissible because it raises issues beyond the scope of this license renewal proceeding; it fails to raise a genuine issue of law or fact; it is unsupported by expert opinion; and it lacks a basis in fact.

a. Contention A Raises Issues Beyond the Scope of This Proceeding

i. Findings From NRC Inspection Reports Are Ongoing Compliance Oversight Activities Beyond the Scope of This Proceeding

BREDL appears to present the preliminary findings from a recent NRC Inspection Report to argue that the Sequoyah site flood mitigation strategy is deficient in some way. However, this claim raises current safety issues and is therefore beyond the scope of this license renewal proceeding.[79]

Questions about the safety of Sequoyah's flood mitigation strategy will be addressed by the NRC as part of its continuing responsibility to oversee the safety and security of ongoing plant operations and are not within the scope of this license renewal proceeding.[80] The Commission discussed the limited scope of licensing reviews in the 1991 License Renewal Rule concluding that "the decision to issue a renewed operating license need not involve a licensing

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[78] *Id.*

[79] *Turkey Point*, CLI-01-17, 54 NRC at 8-10.

[80] *Id.* (holding that 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).

review of the adequacy of or compliance with a plant's licensing basis" but instead "should normally be limited to whether actions have been identified and have been or will be taken to address age-related degradation unique to license renewal."[81]

Moreover, the inspection process itself supports the proposition that the NRC is examining activities conducted under Sequoyah's existing operating license as they relate to safety and compliance with the NRC's rules and regulations and with the conditions of the Sequoyah license. Accordingly, the inspection reports BREDL cites themselves show that Contention A raises issues beyond the scope of this proceeding. The Commission stated in *Diablo Canyon* that review of the Staff's efforts to address current operational issues identified in inspection reports is "precisely the type of duplicative review that appropriately is excluded from a license renewal proceeding."[82] Thus, the Intervenors' claims regarding current operation are outside the scope of this proceeding and do not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii).[83]

ii. Current Operating Activities Related to Fukushima Are Beyond the Scope of This Proceeding

In combination with its citation of § 54.30(a), BREDL's discussion of the NRC Order and flooding at Fukushima Dai-ichi in Contention A may be read as a claim that TVA is failing to maintain Sequoyah systems, structures, and components and that they are not performing their intended functions in a manner consistent with the plant's current licensing basis.[84] As

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[81] 1991 License Renewal Rule, 56 Fed. Reg. at 64,946.

[82] *Diablo Canyon*, CLI-11-11, 74 NRC at 435-36 ("The matters identified in the inspection reports are subject to the Staff's regulatory oversight process for operating reactors. . . we need not revisit our well-established, ongoing compliance oversight activities.").

[83] To the extent that Intervenors believe there are existing operational issues at Sequoyah that warrant immediate action, their remedy is to file a § 2.206 petition.

[84] Petition at 11-12.

discussed above, the Commission limits hearings on license renewals to reflect the narrow scope of NRC review on such applications. Noting that "[i]n establishing its license renewal process, the Commission did not believe it necessary or appropriate to throw open the full gamut of provisions in a plant's current licensing basis to re-analysis during the license renewal review," the Commission in *Turkey Point* stated that the "current licensing basis . . . is effectively addressed and maintained by ongoing agency oversight, review, and enforcement."[85] To the extent that Contention A asserts that Sequoyah is not operating in conformance with its current licensing basis, BREDL has several remedies (including submission of a § 2.206 petition) to request resolution via the NRC's established and ongoing regulatory processes. Current operating issues that are subject to resolution through existing regulatory processes are not appropriate subjects for this license renewal proceeding.[86]

b. Even if Intervenors' Claims Regarding Current Operation Were Within the Scope of This Proceeding, They Lack Sufficient Basis and Support, Are Immaterial, and Fail to Demonstrate a Genuine Dispute With the Application

As discussed below, even if Intervenors' claims about the current safety of Sequoyah were within the scope of this license renewal proceeding, Contention A would not meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1) because it lacks sufficient basis, is immaterial, and otherwise fails to demonstrate a genuine dispute with the license renewal application. 10 C.F.R. §§ 2.309(f)(1)(ii), (iv), (v), (vi).

i. Proposed Contention A Lacks Sufficient Basis and Support

In its Petition, BREDL cites an NRC Inspection Report letter, the Order, and a newspaper article in support of Contention A. These documents do not, however, provide

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[85] *Turkey Point*, CLI-01-17, 54 NRC at 9.

[86] *Id.*; *see also Diablo Canyon*, CLI-11-11, 74 NRC at 435-36.

sufficient basis or support for Contention A. BREDL provides no facts or expert opinion to support its assertion that updated calculations show greater flooding risks than were estimated in prior data, its assertion that a remedy proposed by TVA would be a "stopgap," and its implicit argument that more substantial measures exist and are thus are being overlooked due to their expense. It is the petitioner's obligation to "provide the analyses and expert opinion showing why its bases support its contention," an obligation that must be satisfied when the petition is filed.[87]

Specifically, BREDL makes the following statements in its Petition:

> TVA's updated calculations showed flooding at Sequoyah could rise 2.4 feet higher than that plant was designed to handle. Earlier assumptions were based on decades-old data which underestimated the potential severity of flooding. But TVA's remedy, sand and gravel baskets placed on upstream riverbanks, are stopgaps. More substantial measures for TVA's nuclear fleet would cost tens of millions of dollars, and flood-proof modifications could top a billion dollars.[88]

No sources or citations are proffered in support of these statements. Where a contention seeks to connect a set of facts with a specific result and that result is not self-evident, expert analysis is needed to bridge the gap.[89] However, BREDL offers no factual explanation, source citation, or expert opinion in support of its assertion that a remedy proposed by TVA would be a "stopgap." BREDL also offers no further explanation for its assertion that the proffered method is a "stopgap" or why other alternatives would be "more substantial." Thus, by not providing sufficient facts or expert analysis to support its assertions, BREDL has not met its obligation to "provide the analyses and expert opinion showing why its bases support its

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[87] *Georgia Tech*, LBP-95-6, 41 NRC at 305.

[88] Petition at 11.

[89] *Palisades*, LBP-06-10, 63 NRC at 352, *aff'd,* CLI-06-17, 63 NRC 727 (2006).

contention."[90] Consequently, Contention A is inadmissible because it does not meet the basis and support requirements of 10 C.F.R. § 2.309(f)(1)(ii), (v).

ii. Proposed Contention A Is Immaterial and Fails to Raise a Genuine Dispute With the Application

To the extent that BREDL is arguing that "TVA has not implemented necessary precautions to prevent [a Fukushima-like] disaster in the Tennessee Valley," BREDL fails to show any linkage between the accident at Fukushima and Sequoyah—and thus offers nothing to demonstrate a dispute with the application, which refers explicitly and only to the Sequoyah plant and conditions that affect it.[91] With respect to Contention A, BREDL fails to address a single portion of Sequoyah's license renewal application, thereby failing to show that a genuine dispute exists with the applicant on a material issue of law or fact as required by 10 C.F.R. § 2.309(f)(1)(iv), (vi).[92]

2. BREDL Contention B Should Be Held in Abeyance

BREDL Contention B states:

> NRC Cannot Grant the Sequoyah License Renewal Without Conducting a Thorough Analysis of the Risks of the Long-term Storage of Irradiated Nuclear Fuel Generated by Sequoyah Units 1 and 2.

BREDL asserts that "until there are new rules approved by the Commission and accepted by the Court, either NRC must suspend a final decision on the LR" or, in the alternative, the

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[90] *Georgia Tech*, LBP-95-6, 41 NRC at 305.

[91] Petition at 12.

[92] *See e.g.*, *Entergy Nuclear Generation Company* (Pilgrim Nuclear Power Station), LBP-12-01, 75 NRC 1, 20 (2012).

Applicant "must complete an environmental impact statement encompassing on-site and beyond-60 year high-level radioactive waste storage."[93]

The Staff maintains that, consistent with the recent Commission decision in *Calvert Cliffs,* this contention should be held in abeyance pending further Commission order.[94] As the Commission explained in its ruling, "[w]aste confidence undergirds certain agency licensing decisions…"[95] The Commission noted that "[b]ecause of the recent court ruling striking down [its] current waste confidence provisions, [it is] now considering all available options for resolving the waste confidence issue, which could include generic or site-specific NRC actions, or some combination of both."[96] The Commission also indicated that, as an exercise of its inherent supervisory authority over adjudications, all waste confidence-related contentions filed in the near term should be held in abeyance pending further order.[97]

Although the Commission issued a Staff Requirements Memorandum ("SRM") directing the Staff to develop a generic environmental impact statement ("EIS") to support an updated waste confidence decision and temporary storage rule and proceed with a rulemaking, the Commission noted that it supports maintaining the option to conduct some environmental analyses of waste confidence issues on a site-specific basis in support of licensing decisions.[98] In addition, the Commission has not yet provided additional direction with regard to waste

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[93] Petition at 14.

[94] *Calvert Cliffs*, CLI-12-16, 76 NRC at __ (slip op. at 6).

[95] *Id*. at 4.

[96] *Id.*

[97] *Id*. at 6.

[98] *See* Memorandum from Annette L. Viette-Cook to R.W. Borchardt, Staff Requirements – COMSECY-12-0016 – Approach for Addressing Policy Issues Resulting from Court Decision to Vacate Waste Confidence Decision and Rule (Sept. 6, 2012)(ADAMS Accession No. ML12250A032).

confidence-related contentions. Thus, this contention, like similar contentions in adjudication, should be held in abeyance unless the Commission orders otherwise.[99] The parties' hearing file and mandatory disclosure obligations should, likewise, be held in abeyance.

3. Contention C

In Contention C, BREDL states:

> License renewal regulations at § 54.21 require reasonable assurance during the license term that activities will be conducted in accordance with the CLB, but four counties out of five within 50 Miles of Sequoyah have higher cancer death rates than the state average.[100]

In support of its contention, BREDL proffers data comparing the cancer mortality rates for the five counties within a 50-mile zone of Sequoyah with similar data for the State of Tennessee.[101] BREDL states that Changchang Zhou, of the Duke University Stanback Internship Program, compiled the data using annual Tennessee Vital Statistics Summary Resident Data Reports for 2001 through 2010 from the Tennessee Department of Health's Division of Health Statistics.[102] BREDL did not, however, proffer an affidavit, report, declaration, or any statement by ChangChang Zhou to this effect. According to BREDL, the data for four of the counties show higher cancer mortality, and the data for all five counties show greater variability in the cancer mortality rate than the state average for most years.[103] BREDL asks, "Is the observed fluctuation and general increase caused by SQN [Sequoyah]?" and states that "further study is

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[99] *See Northern States Power Co.* (Prairie Island Nuclear Generating Plant Independent Spent Fuel Storage Installation), LBP-12-24, 76 NRC ___, ___ (Dec. 20, 2012) (slip op. at 7).

[100] Petition at 14-15.

[101] *Id.* at 15-16; Appendix A, Table 1: Cancer Statistics for Counties within 50 Miles of Sequoyah in Tennessee.

[102] *Id.* at 15.

[103] *Id.* at 15-16.

needed to answer this question."[104] BREDL also asserts, without citation to any study or expert affidavit, that its observations are "corroborated by data in other states' data within the 50-mile radius."[105] BREDL concludes that, contrary to the Applicant's Environmental Report, the data "indicate that the human health impact is not 'small.'"[106] BREDL then cites the regulation in 10 C.F.R. § 54.30(a) and appears to suggest that its data shows that there is a lack of reasonable assurance that licensed activities will be conducted in accordance with the current licensing basis and that, therefore, action on the part of the licensee is required to ensure that the intended function of systems, structures, and components will be maintained during the term of the current license.[107]

As set forth below, Contention C is inadmissible as it raises issues beyond the scope of this license renewal proceeding; it fails to raise a genuine issue of law or fact; it is unsupported by expert opinion; and it is speculative.

a. Contention C Raises Issues Beyond the Scope of This Proceeding

Contention C is inadmissible because it constitutes an impermissible challenge to the Commission's determination that the health impacts of operation of a nuclear power plant during the license renewal period are "small" and apply to all plants. Whether that determination is correct is a question beyond the scope of this proceeding. In addition, to the extent that BREDL claims that the Applicant is not meeting its current licensing basis, it raises a current operating issue, which is also beyond the scope of this proceeding. Accordingly, Contention C does not meet the requirements for admissibility in 10 C.F.R. § 2.309(f)(1)(iii).

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[104] *Id*. at 16.

[105] *Id.*

[106] *Id.*

[107] *Id.*

In NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" ("NUREG-1437") (May 1996), the Staff found that the health impacts of nuclear plant operations were "small" and generic for all plants.[108] Accordingly, health impacts were designated as a "Category 1" issue.[109] That determination was codified in Appendix B to 10 C.F.R. Part 51[110] and includes radiation exposure to the public during the license renewal period.[111] The Commission explained that it identified human health impacts as a Category 1 issue based on its determination "that impacts are of small significance if doses to individuals and releases do not exceed the permissible levels in the Commission's regulations."[112] However much BREDL disagrees with the determination that health impacts are "small" and generic, that determination is not subject to attack in an adjudicatory proceeding.[113] The regulations at 10 C.F.R. § 2.335(a) explicitly prohibit such an attack.[114] As the Commission has

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[108] GEIS at 4-84, 4-95.

[109] *Id.*

[110] Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, Final Rule, 61 Fed. Reg. 28,467, 28,483 (June 5, 1996), *amended by* 61 Fed. Reg. 66,537 (Dec. 18, 1996) ("the amendment codifies certain environmental impacts associated with license renewal that were analyzed in NUREG-1437".

[111] See Table B-1, 61 Fed. Reg. at 28,493.

[112] *Id*. at 28,476.

[113] *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Station), *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc*. (Pilgrim Nuclear Power Station), CLI-07-03, 65 NRC 13, 17, *reconsid. denied*, *CLI-07-13*, 65 NRC 211, 214 (2007).

[114] The regulation in 10 C.F.R. § 2.335(a) provides:

> Except as provided in paragraphs (b), (c), and (d) of this section, no rule or regulation of the Commission, or any provision thereof, concerning the licensing of production and utilization facilities, source material, special nuclear material, or byproduct material, is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding subject to this part.

observed, "[f]undamentally, any contention on a 'Category 1' issue amounts to a challenge to our regulation that bars challenges to generic environmental findings."[115]

This is not to say that the health effects determination in the GEIS cannot be questioned; the question can be raised, but not in this forum and not in this manner. The proper forum for a challenge to the GEIS is the rulemaking forum. As the Commission stated in the *Diablo Canyon* license renewal proceeding, "the appropriate challenge to the adequacy of the GEIS is in the context of rulemaking, not this adjudication."[116] In the alternative, the health effects issue could be raised here if BREDL applied for, and made the case for, a waiver of the rule. In *Vermont Yankee and Pilgrim*, the Commission noted that 10 C.F.R. § 2.335(b) permits the waiver of a rule, and that, in theory, "approval of a waiver could allow a contention on a Category 1 issue to proceed where special circumstances exist."[117] Here, however, BREDL has not sought a waiver -- and even if it had, it has not demonstrated the special circumstances that would warrant the admission of its contention pursuant to 10 C.F.R. § 2.335(b).

Contention C may also be read as a claim that TVA is failing to maintain Sequoyah systems, structures, and components and that they are not performing their intended functions

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[115] *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Station), *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc*. (Pilgrim Nuclear Power Station), CLI-07-03, 65 NRC 13, 20, *reconsid. denied*, *CLI-07-13*, 65 NRC 211 (2007); *Vermont Yankee and* Pilgrim, CLI-07-3, 65 NRC at 20; *see* Florida *Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 154-55 (2001). In addition, Contention C may be viewed as a challenge to 10 C.F.R. § 51.95(c), which provides that the Commission will make its license renewal decision based, in part, on the GEIS for issues designated as "Category 1" issues. It may also be seen as a challenge to 10 C.F.R. § 51.53(c)(3)(i) which provides that a license renewal applicant need not include an analysis of such generic issues in its environmental report. To the extent that the contention is viewed as a challenge to either 10 C.F.R. § 51.95(c) or § 51.53(c)(3)(i), it is inadmissible for raising an issue beyond the scope of this proceeding.

[116] *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 457 (2011).

[117] *Vermont Yankee and Pilgrim*, CLI-07-03, 65 NRC at 20; *see also Diablo Canyon,* CLI-11-11, 74 NRC at 456; *Turkey Point*, LBP-01-6, 53 NRC at 154-55.

in a manner consistent with the plant's current licensing basis.[118] To the extent that Contention C asserts that Sequoyah is not operating in conformance with its current licensing basis, the contention raises an issue that is subject to resolution via the NRC's established and ongoing regulatory processes. Because current operating issues are resolved through existing regulatory processes, they are not an appropriate subject for this proceeding.[119] For this additional reason, Contention C should be denied for raising issues beyond the scope of this proceeding and thus failing to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii).

b. Contention C Is Unsupported and Fails to Raise a Genuine Dispute

While it does not say so explicitly, BREDL appears to be asserting that renewal of the Sequoyah license has caused, and by inference, will cause, disproportionately higher cancer rates in the counties surrounding the plant. To the extent that this is what BREDL means to argue, Contention C is inadmissible because there is no factual analysis or expert opinion to establish a link between Sequoyah license renewal and the higher cancer mortality rates cited in the contention.[120] Factual or expert analysis is needed to establish this nexus and bridge the gap between the cause and effect that BREDL appears to be claiming. BREDL acknowledges that this gap exists, stating that additional research is need to determine whether "the observed fluctuation and general increase [in cancer deaths] is caused by SQN[.]"[121] The *Prairie Island* Board denied admission of a similarly unsupported contention on the grounds that the cited

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[118] Petition at 16.

[119] *Diablo Canyon*, CLI-11-11, 74 NRC at 436; *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 490-93.

[120] *Georgia Tech*, LBP-95-6, 41 NRC at 300 (contention based on opinion that was not supported by basis or expert opinion held inadmissible).

[121] Petition at 16.

studies did not "attribute these higher [cancer] rates to radionuclide emissions."[122] BREDL Contention C is similarly inadmissible for lack of support and, thus, for failure to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

In addition, the data analysis itself is unsupported by fact or expert affidavit. While BREDL cites county and state cancer statistics, it proffers no factual or expert affidavit stating the source of the data or the accuracy of the compilation of that data in Table 1 in Appendix A to the petition and the accuracy of the presentation of the data in graph form in Figure 1 at page 15 of the petition. The lack of a supporting affidavit is particularly problematic as there is no explanation for the inclusion of data for only four out of the fourteen counties fully within a 50 mile radius of the plant and the inclusion of data for only one of the seventeen counties partially within a 50 mile radius of the plant.[123] As the Commission stated, in denying contention admissibility in *Comanche Peak*, mere reference to a document "without facts or expert opinion that explain their significance for the unique characteristics of the site or reactors that are the

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[122] *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), LBP-08-26, 68 NRC 905, at 930 (2008). *See also, Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc*. (Pilgrim Nuclear Station), CLI-12-21,76 NRC ___, ___ (Dec. 6, 2012) (slip op. at 6) (Commission found contention admissibility requirements not met where contention did not explain how the alleged harm would occur); *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 436 (2011); *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-11-32, 74 NRC 654, 671 ("since [the intervenor] offers nothing to link the outcome of the Fukushima events to either the [plant] or the LRA, there is no information provided to show any dispute with the application."), *review declined,* CLI-12-13, 45 NRC 681 (June 7, 2012); *Florida Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 250 (2011) (contention inadmissible where petitioner offered no tangible information, no experts, no substantive affidavits, but only bare assertions and speculation).

[123] In its Petition, BREDL states that it is "[f]ocusing on counties within the 50-mile zone around Sequoyah – Hamilton, Bledsoe, Marion, Monroe and McMinn[.]" Petition at 15. BREDL also states that the cancer mortality rate is more variable "[f]or the five counties surrounding Sequoyah." *Id*. However, these five counties are not the only counties within 50 miles of the plant. The maps in TVA's Environmental Report show that there are, in fact, ten Tennessee counties and four Georgia counties within a 50 mile radius of the plant. *See* TVA Environmental Report, Figure 2.6-4, page 2-124 (ADAMS Accession No. ML13024A006). In addition, portions of eight Tennessee counties, six Georgia counties, two Alabama counties, and one North Carolina county also lie within 50 miles of the plant. *Id.* Because there is no affidavit to support the table and figure that BREDL relies on, there is no explanation for the inclusion of some counties and the exclusion of others.

subject of the petitions, does not provide sufficient support[.]"[124] The petitioner must "explain, with asserted facts or expert opinion, how [the data it proffers] presents a 'seriously different picture of the environmental impact of the proposed project from what was previously envisioned.'"[125]

Finally, Contention C is speculative and, thus, inadmissible for failing to raise a genuine dispute.[126] BREDL frankly acknowledges the speculative nature of this contention when it asks, "Is the observed fluctuation and general increase caused by SQN?" and then states that "[f]urther study is needed to answer this question[.]"[127] Speculation is insufficient to establish admissibility of a contention.[128]

4. Contention D

Contention D:

> TVA's Integrated Plant Assessment ("IPA") for the LRA fails to identify and assess safety-related incidents at SQN in its required time-limited aging analysis ("TLAA"). 10 CFR 54.21.[129]

Petitioners assert that the LRA is deficient because TVA management "shortcomings

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[124] *Luminant Generation Co. LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), CLI-12-7, 75 NRC 379, 390 (2012).

[125] *Id.*

[126] 10 C.F.R. § 2.309(f)(1)(vi).

[127] Petition at 16.

[128] *NextEra Energy Seabrook* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 337 (2012) (Commission rejected as speculative intervenor's "generalized suggestion" that alternative cost estimates and studies should be used in SAMA analysis); *Turkey Point*, LBP-11-6, 73 NRC at 250 (intervenor's claim that facility "may" be inconsistent with "proposed redevelopment efforts" ruled speculative and insufficient to support contention admissibility); *Calvert Cliffs 3 Nuclear Project and Unistar Nuclear Operating Services,* LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-10-24, 72 NRC 720, 771 (2010) (rejecting as speculative unsupported claim that capital costs will exceed value stated in the DSEIS and will result in higher electricity rates, thus altering the DSEIS' cost-benefit analysis).

[129] Petition at 16.

such as "failures to detect problems, to prepare for storms and to maintain security" show that TVA has not demonstrated that effects of aging on the intended functions will be adequately managed for the period of extended operation as required by 10.C.F.R. 54.21(c)(iii).[130] Petitioners quote TVA LRA statements that TVA's Quality Assurance (QA) procedures, review and approval processes, and administrative controls meet 10 C.F.R. Part 50, Appendix B, and its administrative controls are consistent with NUREG-1801.[131] Petitioners claim that "a 7.14 safety-related findings" average per annum (indicated by Sequoyah quarterly incident reports) during the past 14 years, the increase in frequency and severity of safety-related findings over the past six to eight years, and security and other violations "indicate age management problems outside of the CLB."[132]

Because this contention relies on a listing of performance deficiencies and generally challenges the competence or safety consciousness of TVA personnel and management as well as whether the facility operates within its current licensing basis, it fails to pose an admissible issue in the limited scope of a license renewal proceeding. License renewal proceeding is not an opportunity to litigate operational issues that are already addressed by existing NRC

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[130] Petition at 18.

[131] Petition at 17-18 (citing LRA Appendix B, Administrative Controls, at B-3).

[132] Petition at 18. Petitioners list: 1) a June, 30,1999 turbine building railroad bay flooding event during a heavy rainfall due to inadequate drainage and lack of adequate adverse weather preparations; 2) an April 19, 2000 security plan violation when employee entered the site without removing his shoes after a site access, portal metal detector alarm sounded; 3) 2001 performance errors that led an emergency diesel generator being returned to service improperly, and the unavailability of a boric acid flow to the refueling water storage tank during a steam generator tube rupture event; and 4) a 2004 failure to identify and correct breaker mechanism operated cell (MOC) slide assembly, resulting in a Residual Heart Removal Pump failure to start on demand. Petition at 17-18. Petitioners also assert that "factors which further undermine adequate management are detailed . . . in Contention F." Petition at 18. Apparently, this reference is meant to also include the performance problems identified as a basis for that contention. However, as detailed further below, Petitioners list past performance issues or general concerns with current operation that are not unique to the period of extended operation and thus, are not appropriate for consideration in a renewal proceeding.

regulatory processes.[133] License renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to [our] ongoing compliance oversight activity.[134] "[B]road-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" because such conceptual issues are "outside the bounds of the passive, safety-related *physical* systems, structure, and components that form the scope of our license renewal review.[135]

The petitioners in *Prairie Island* cited noncompliances that they asserted reflected a poor safety culture, arguing their concerns about a reasonable assurance finding in the Staff's SER extended to the viability of the renewal application.[136] The Commission construed the contention as a challenge to current operations at the facility that did not address "how it might operate during the period of extended operation and inadmissible."[137] Because Petitioners similarly identify performance and safety culture issues that pertain to current operations and do not explain any nexus to license renewal, their contention should not be admitted for litigation in this proceeding.

Although Petitioners claim that the TLAA must identify and assess "safety-related incidents,"[138] Petitioners do not identify a specific regulatory requirement that requires this action. Time-limited aging analyses are licensee calculations and analyses that:

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[133] *Northern States Power Co*. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 381, 490 (2010).

[134] *Id.*, 72 NRC at 490 (citing "Final Rule: Nuclear Power Plant License Renewal," 56 Fed. Reg. 64,943, 64,552 (Dec. 13, 1991).

[135] *Prairie Island,* 72 NRC at 491 (footnotes omitted) (emphasis in original).

[136] *Id*. at 486.

[137] *Id*. at 492.

[138] Petition at 17.

(1) Involve systems, structures and components [SSCs] within the scope of license renewal, as defined in 54.4(a);

(2) Consider the effect of aging;

(3) Involve time-limited assumptions defined by the current operation term, for example, 40 years; Were determined to be relevant by the licensee in making a safety determination;

(4) Involve conclusions or provide the basis for conclusion related to the capability of the [SSC] to perform its intended functions, as delineated in 54.4(b); and

(5) Are contained or incorporated by reference in the CLB.[139]

An applicant must demonstrate that "(i) [t]he [TLAA] remain valid for the period of extended operation; (ii) [t]he analyses have been projected to the end of the period of extended operation; or (iii) [t]he effects of aging on the intended functions will be adequately managed for the period of extended operation."[140] Contrary to Petitioners' suggestion, 10 C.F.R. § 54.21 requires applicants to list structures and components subject to an aging management review, not "identify and assess safety-related incidents" as alleged in Contention D.[141] Because Petitioners do not show that TVA has failed to meet a regulatory requirement, Petitioners have not identified an issue material to a finding the NRC must make to support license renewal as required by 10 C.F.R. § 2.309(f)(1)(iv).

In addition, Petitioners' apparently list incidents to dispute the TVA statement about the Sequoyah QA program and guidance in NUREG-1801.[142] However, this claim is only supported

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[139] 10 C.F.R. § 54.4.

[140] 10 C.F.R. § 54.21(c).

[141] *See* Petition at 18.

[142] *See* Petition at 16-17 (citing *See* Petition at 16-17(citing LRA Appendix B, Administration Controls, at B-3). NUREG-1801, Generic Aging Lessons Learned (GALL) Report, has undergone revisions. The July 2001 version is available at ADAMS Accession No. ML012060392. Revision 2, the December 2010 version is available at ADAMS Accession No. ML103490041.

by Petitioners' general assertion that multiple performance failures "indicate age management problems outside the CLB."[143] This inappropriate attempt to litigate operating issues should be rejected as failing to raise a matter material to, and within, the narrow scope of a renewal proceeding as required by 10 C. F. R. § 2.309, and as such fails to raise a genuine dispute the applicant a material issue as required by 10 C.F.R. § 2.309(f)(1)(vi). The failure to cite a specific portion of the TLAA and to explain why a particular TLAA is deficient does not suffice to identify a genuine dispute with the Applicant. This proceeding is not an opportunity to "duplicate the Commission's ongoing review of operating reactors."[144] The current licensing basis or matters that relate to everyday operational issues that are effectively maintained by ongoing agency oversight, review and enforcement are outside the scope of a renewal proceeding.[145] Litigation of performance, operational history or safety culture issues would duplicate ongoing NRC oversight activity and raise matters not appropriate for consideration in this proceeding.[146]

Further, Petitioners' reliance on out of scope, operational issues does not satisfy the requirement to allege factor or provide expert opinion which supports their position. Petitioners make no showing regarding a specific concern about the adequacy of the TLAA other than the general assertion that inspection related information is absent. *See* Petition at 16. Because this proposition is not supported by supported, the requirements 10 C.F.R. § 2.309(f)(1)(v) are not met.

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[143] *See* Petition at 17.

[144] *Turkey Point*, CLI-01-17, 54 NRC at 7 (quoting 1991 Renewal Rule, 56 Fed. Reg. at 69,946.

[145] *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-04-36, 60 NRC 631, 638-639 (2004); *Turkey Point*, 54 NRC at 8-10.

[146] *See Prairie Island*, 72 NRC at 491.

In sum, this contention is inadmissible because Petitioners fail to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi). To the extent a petitioner believes that the Staff has overlooked information indicating a performance issue or inadequate safety culture as a general matter, separate and apart from license renewal, the remedy is to file a petition for enforcement action under 10 C.F.R. § 2.206.[147]

5. Contention E

In Contention E, the Petitioners assert:

> The LRA Fails to Consider Plutonium Fuel Use at SQN Which Would Place it Outside the Current Licensing Basis.[148]

The Petitioners state that because TVA currently is a cooperating agency in the preparation of the Department of Energy Final Surplus Plutonium Disposition Supplemental Environmental Impact Statement, Sequoyah is essential to efforts to use weapons-grade plutonium down-blended with uranium ("mixed oxide" or "MOX fuel").[149] Petitioners (1) raise safety concerns related to metal and containment embrittlement, and high radiation doses associated with use of "plutonium fuel,"[150] and (2) quote Advisory Committee on Reactor Safeguards ("ACRS") statements about actinides releases from MOX fuel during reactor accidents.[151] Petitioners also assert that the Applicant must provide enough information to demonstrate that the effects of aging will be adequately managed so that the intended functions

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[147] *See Prairie Island*, 72 NRC at 492; *Millstone*, CLI-04-36, 60 NRC at 638; *Turkey Point*, CLI-01-17, 54 NRC at 23, 24 n.18.

[148] Petition at 18.

[149] *Id.* at 18-19.

[150] Petition at 19-20 (citing DOE Final Surplus Plutonium Disposition Supplemental environmental Impact Statement at Table I-5.

[151] *Id.* at 20 (quoting Letter from ACRS, to Shirley Jackson, NRC Chairman, "Use of Mixed Oxide Fuel in Commercial Nuclear Power Plants" (May 17, 1999) (9905260135)(Legacy Library)).

of SSCs will be maintained consistent with the CLB for the period of extended operation per 10 C.F.R. 54.21(a), but that neither the renewal application nor the Environmental Report mentions plutonium fuel.[152]

This contention is inadmissible because it raises issues beyond the scope of this license renewal proceeding, fails to raise a matter material to findings the NRC must make to support renewal, and fails to show a genuine dispute with the applicant on a material issue of law or fact. *See* 10 C.F.R. § 2.309(f)(1)(iii), (iv), (vi).

As the Commission noted in a decision reversing a licensing board admission of a contention involving possible use of MOX fuel, as a general matter, contentions based on projected changes to a license, not currently before the NRC in any proceeding or application, do not suffice to support contention admission.[153] With respect to the limited scope of license renewal, the Commission highlighted that a "current" licensing basis is not a future licensing basis, CLB constitutes NRC requirements that "'are docketed and in effect,'" and any future plan to use MOX fuel is not part of the CLB.[154] The Commission further noted that viewing license renewal as "contemplat[ing] inquiry into future, inchoate plans of the Licensee would . . . invite petitioners in license renewal cases to raise safety issues involving a myriad of possible future licensing amendments.[155]

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[152] *Id*.

[153] *Duke Power Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 291-292 (2002).

[154] *Id*. at 293 (quoting 10 C.F.R. § 54.3).

[155] *Id*. at 292. The Commission similarly concluded that a MOX contention would be outside the scope of the NEPA portion of a renewal proceeding where the proposal is not pending before the agency and does not have a nexus to (or interdependence on) the action the agency is actively considering. *Id.* at 294-297 (citations omitted). This conclusion comports with a previous ruling that contentions that raise environmental issues are limited to those issues that are affected by license renewal. *Turkey Point*, CLI-01-17, 54 NRC at 11-12.

Petitioners rely on Sequoyah's listing in a DOE SEIS and do not show that there is a pending application to use MOX fuel at SQN, that use of MOX fuel is part of the current CLB or that any amendment approving the use of MOX fuel during the current license term would depend on the issuance of a renewed license.[156] Thus, they have failed to raise a matter within the scope of license renewal, a matter material to findings requisite to support renewal and have failed to raise a genuine dispute with the Applicant. Thus, the contention is inadmissible under § 2.309(f)(1).

If the NRC receives an application, Petitioners would have an opportunity to challenge that proposed amendment in response to a separate *Federal Register* notice of opportunity for hearing on the proposed use of MOX fuel at Sequoyah. Similarly, petitioners would have an opportunity to raise any concerns about aging effects related to the use of MOX fuel at that time.[157]

6. Contention F

a. BREDL Fails to Identify any Flaws With Sequoyah's Site-Specific Aging Management Program for the Ice Condenser

In Contention F, BREDL challenges the aging management programs for Sequoyah's ice condenser.[158] BREDL puts forward an overarching contention in Contention F and three related contentions, Contention F1, Contention F2, and Contention F3.[159] These contentions

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[156] *See* Petition at 18-21.

[157] *McGuire and Catawba,* CLI-02-14, 55 NRC at 297.

[158] Petition at 21.

[159] These three related contentions contain different assertions regarding different aspects of Sequoyah's ice condenser. Each of these contentions will be addressed in full in subsequent sections below.

are inadmissible on the grounds that they are unsupported, lack specificity, and raise no genuine issue of fact or law for adjudication in this proceeding.

BREDL's overarching contention, Contention F, states:

> The aging management programs associated with TVA's Sequoyah Ice Condensed systems are insufficient to assure safe operations and prevent design basis and severe accidents.[160]

In the discussion that accompanies the contention, BREDL cites one of the license renewal regulations, 10 C.F.R. § 54.21(a)(1) and (3),[161] and one of the environmental regulations,

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[160] Petition at 21.

[161] Section 54.21(a)(1) states:

> For those systems, structures, and components within the scope of this part, as delineated in § 54.4, identify and list those structures and components subject to an aging management review. Structures and components subject to an aging management review shall encompass those structures and components--
>
> (i) That perform an intended function, as described in § 54.4, without moving parts or without a change in configuration or properties. These structures and components include, but are not limited to, the reactor vessel, the reactor coolant system pressure boundary, steam generators, the pressurizer, piping, pump casings, valve bodies, the core shroud, component supports, pressure retaining boundaries, heat exchangers, ventilation ducts, the containment, the containment liner, electrical and mechanical penetrations, equipment hatches, seismic Category I structures, electrical cables and connections, cable trays, and electrical cabinets, excluding, but not limited to, pumps (except casing), valves (except body), motors, diesel generators, air compressors, snubbers, the control rod drive, ventilation dampers, pressure transmitters, pressure indicators, water level indicators, switchgears, cooling fans, transistors, batteries, breakers, relays, switches, power inverters, circuit boards, battery chargers, and power supplies; and
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> (ii) That are not subject to replacement based on a qualified life or specified time period.

The regulations are clear that the only requirement is to list the passive long-lived structures and components subject to an aging management review. As explained below, Sequoyah's License Renewal Application ("LRA") listed each of the components in the ice condenser and containment that are subject to an aging management review.

10 C.F.R. § 51.53(c)(iii).[162] However, BREDL proffers no facts in support of its allegation that the aging management programs are deficient.

In order to raise a valid contention for hearing, a petitioner must identify the specific portion of the license renewal application or environmental report[163] that it believes is inadequate, incomplete, or missing.[164] The regulations require intervenors to "include references to specific portions of the application (including the applicant's environmental report and safety report) that the [intervenor] disputes …."[165] BREDL, however, has not identified any

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(footnote continued)

Section 54.21(a)(3) states:

> For each structure and component identified in paragraph (a)(1) of this section, demonstrate that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the CLB for the period of extended operation.

The regulations are clear that the scope of license renewal is limited to managing the effects of aging such that intended functions of the passive long-lived structures and components are maintained consistent with the CLB. TVA has proposed aging management plans for each of the components that it identified as being subject to an aging management review,and BREDL has not disputed any specific portion of the aging management review.

[162] Section 51.53(c)(3)(iii) states:

> The report must contain a consideration of alternatives for reducing adverse impacts, as required by § 51.45(c), for all Category 2 license renewal issues in Appendix B to subpart A of this part. No such consideration is required for Category 1 issues in Appendix B to subpart A of this part.

Similar to BREDL's other bare assertion, it has not pointed to any aspect of TVA's LRA or Environmental Report ("ER") as failing to meet the requirements of this regulation.

[163] For the purposes of raising an environmental challenge to the Staff's Environmental Impact Statement ("EIS"), the licensee's environmental report stands in place of the EIS until the Staff's publication of the draft supplemental EIS ("DSEIS"). *Louisiana Energy Servs.*, L.P. (National Enrichment Facility), CLI-05-20, 62 NRC 523, 533 (2005).

[164] *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, 382-83 (2002)).

[165] 10 C.F.R. § 2.309(f)(1)(vi).

specific aging management program as deficient and has not explained what is wrong with the aging management program. Accordingly, Contention F should be rejected as failing to raise a genuine issue for adjudication and for lack of specificity. 10 C.F.R. § 2.309(f)(vi). It is also unsupported and should be rejected on that basis, as well. 10 C.F.R. § 10 C.F.R. § 2.309(f)(v).

7. Contention F-1

a. Containment Contention F-1: Aging Management Plans Lacking

> TVA License Extension Application for the Sequoyah Reactors' Ice Condenser Containments lacks acceptable Aging Management Plans to adequately maintain critical components of the Ice Condenser Containment for 20 years of additional operation.[166]

In Contention F-1, BREDL asserts that (1) Sequoyah's ice condenser has existing design flaws and inspection failures;[167] (2) Sequoyah's aging management plan should have a "specific action plan[] in place to address these aforementioned [ice condenser] design and operational flaws";[168] and (3) the aging management plans fails to address "containment aging phenomena known to have occurred and postulated to occur in the future."[169] BREDL asserts that the Staff is "clearly aware of the existing design flaws and inspection failures at Ice Condense [r] … containment."[170] Petitioners claim that these design flaws exist in all the containments utilizing ice condensers.[171] In support, BREDL cites to a study conducted by

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[166] Petition at 21.

[167] Petition at 21-22.

[168] Petition at 22.

[169] Petition at 23. For the purpose of the Staff's response, the items (2) and (3) have been combined because BREDL did not address any aspect of the substantial aging management review and aging management plans provided by TVA.

[170] Petition at 21.

[171] Petition at 22.

Sandia National Laboratories ("Sandia Study") analyzing typical containments with an ice condenser.[172] The Sandia Study discusses a generic issue: the potential for corrosion in the region around the ice basket in ice condenser containments.

i. BREDL's Challenge to the Design and Operation of the Ice Condenser Is Beyond the Scope of a License Renewal Hearing

BREDL's assertions regarding the operational and design flaws of the ice condenser are outside the limited scope of this license renewal proceeding. The Commission has emphasized its 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 as part of ongoing regulatory oversight processes.[173]

The scope of the license renewal safety review is narrow; it is limited to "plant structures and components that will require an aging management review for the period of extended operation and the plant's systems, structures and components that are subject to an evaluation of time-limited aging analyses."[174] For each structure or component requiring an aging management review, a license renewal applicant must demonstrate that the "effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the [CLB] for the period of extended operation."[175]

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[172] Petition at 22.

[173] *See Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-01-17, 54 NRC 3, 8-10 (2001).

[174] *Duke Energy Corp.*, (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-01-20, 54 NRC 211, 212 (2001).

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

Challenges to the adequacy of a plant's CLB, however, are beyond the scope of license renewal.[176] Thus, to the extent that Contention F-1 seeks to challenge the adequacy of the NRC's safety regulations and the adequacy of Sequoyah's CLB to provide reasonable assurance of adequate protection of public health and safety,[177] it raises issue that are beyond the scope of this proceeding and must, therefore, be rejected.

ii. BREDL's Expert Did Not Challenge any Portion of Sequoyah's AMP for the Ice Condenser

In support of its contention, BREDL submitted the report of Arnold Gundersen. Mr. Gundersen's report, with respect to Contention F-1, consists of six (6) paragraphs. The following paragraphs will address each of Mr. Gundersen's assertions in order. Those paragraphs do not support an admissible contention for a license renewal proceeding. They lack the requisite specificity for admission and they raise no genuine dispute with the license renewal application.

In paragraphs 16 – 17 of his report, Mr. Gundersen asserts that the Staff has been aware of existing design flaws and inspection failures at containments with ice condensers for 15-years.[178] Mr. Gundersen, relying on a 17-year old study, identifies two areas of concern: the ice basket and a small inaccessible location on the containment.[179] To the extent that Mr.

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[176] *See Turkey Point*, CLI-01-17, 54 NRC at 8-9 (stating the Commission's on-going regulatory oversight ensures the adequacy of the plant's current licensing basis, thus there is no reason to reanalyze the adequacy of the CLB for license renewal).

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

[178] Expert Witness Report of Arnold Gundersen to Support the Petition for Leave to Intervene and Request for Hearing by the Blue Ridge Environmental Defense League, Bellefonte Effciency and Sustainability Team, and Mothers Against Tennessee River Radiation, dated May 6, 2013 ("Gundersen Report"), at ¶¶16-17.

[179] Gundersen Report, at 17.

Gundersen is simply asserting that portions of the ice basket and the containment may experience an aging effect, that bare assertion is insufficient to support an admissible contention. An intervenor must identify a material dispute with the application.[180]

In ¶ 18, Mr. Gundersen asserts that Sequoyah's aging management plan should address the containment's design and operational flaws.[181] This misapprehends the license renewal process. License renewal is a narrow proceeding addressing a limited set of issues.[182] The Commission in explaining the limited scope of license renewal proceedings stated:

> We explained that the rule was developed to exclude from review conceptual issues …in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures and components…
>
> …The matters identified in the inspections reports are subject to the Staff's regulatory oversight process for operating reactors. Litigation of the contention necessarily would involve review of the adequacy of [the applicant's] efforts to address the current operational identified in the reports. This is precisely the type of duplicative review that appropriately is excluded from a license renewal proceeding; we need not revisit our well-established, on-going compliance activities.[183]

To the extent that Mr. Gundersen and BREDL believe that the containment's design or operation is inadequate or unsafe, the challenge must be raised in a 2.206 proceeding.[184]

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[180] *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-14, 55 NRC 278, 289 (2002).

[181] Gundersen Report at ¶ 18.

[182] 10 C.F.R. § 2.309(f)(1)(iii); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-05-24, 62 NRC 551, 567 (2005);*see generally* Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943 (Dec. 13, 1991) ("1991 License Renewal Rule"); Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461 (May 8, 1995) ("1995 License Renewal Rule").

[183] *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 435-36 (2011).

[184] *See id.* at 435-37 (2011).

In ¶ 19, Mr. Gundersen states that he and his associates were unable to locate any AMPs addressing the ice condenser or containment. However, Sequoyah's license renewal application devotes a significant portion of its discussion to ice condenser components and containment; it discusses the aging management programs for ice condenser components and containment in depth. The license renewal application discusses the ice condenser and containment for scoping purposes at multiple points. In its license renewal application, Sequoyah provides an overview of the structural and mechanical components for the ice condenser that are scoped into the license renewal process.[185] The license renewal application provides extensive tables identifying the components that are subject to an aging management review.[186] The ice condenser components discussed in the license renewal application include the ice baskets, ice baskets lattice support frames, ice condenser support floor (including wear slab), bolting, chiller housing, condenser casing, and pipes among others.[187] Contrary to BREDL's assertion, the license renewal application contains a detailed discussion of the ice condenser and identifies specific components for aging management review.

Sequoyah's license renewal application also identifies specific aging management programs for each identified component, many of which are subject to multiple aging management programs.[188] For example, the license renewal application states that the ice

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[185] LRA at 2.3-137 – 2.3-138, 2.4-4 – 2.4-5.

[186] LRA, Table 2.3.3-17-22, "Ice Condenser System Nonsafety-related Components Subject to Aging Management Review," at 2.3-169; LRA, Table 2.4-1, "Reactor Building Components Subject to Aging Management Review," at 2.4-8 –2.4-14.

[187] *See* LRA, Table 2.3.3-17-22, "Ice Condenser System Nonsafety-related Components Subject to Aging Management Review," at 2.3-169; LRA, Table 2.4-1, "Reactor Building Components Subject to Aging Management Review," at 2.4-8 –2.4-14.

[188] LRA, Table 3.5.2-1, "Reactor Building Summary of Aging Management Evaluation," at 3.5-64; LRA, Table 3.3.2-17-22, "Ice Condenser System Nonsafety-Related Components Affecting Safety-Related Systems Summary of Aging Management Evaluation," at 3.3-329 – 3.3-337.

baskets, ice baskets lattice support frames, intermediate deck and top deck of the ice condenser, and ice condenser support floor (including wear slab) are subject to the Structures Monitoring AMP.[189] In addition, the intermediate deck and top deck of the ice condenser are subject to the Boric Acid Corrosion AMP.[190] Other AMPs used for ice condenser components include Bolting Intergrity AMP, External Surface Monitoring AMP, Water Chemistry Control-Closed Treated Water Systems AMP, and Selective Leaching AMP.[191] In addition to identifying the applicable aging management programs, Sequoyah's license renewal application explains how each of these aging management programs will work.[192]

With this extensive discussion of the AMPs readily available for BREDL's review in the license renewal application, BREDL's assertion that no AMPs exist is insupportable and erroneous and will not support admissibility. Commission precedent demands more from intervenors. Intervenors must identify the portion of the license renewal application with respect to which they have a material dispute.[193] In this case, BREDL fails to dispute any portion of the license renewal application or take issue with any of Sequoyah's proposed aging management programs. Accordingly, Contention F-1 is inadmissible for failing to raise a genuine issue for adjudication. 10 C.F.R. § 2.309(f)(1)(vi).

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[189] LRA, Table 3.5.2-1, "Reactor Building Summary of Aging Management Evaluation," at 3.5-64.

[190] LRA, Table 3.5.2-1, "Reactor Building Summary of Aging Management Evaluation," at 3.5-64.

[191] LRA, Table 3.3.2-17-22, "Ice Condenser System Nonsafety-Related Components Affecting Safety-Related Systems Summary of Aging Management Evaluation," at 3.3-329 – 3.3-337.

[192] *See* LRA, Appendix B, at B-16 – B-18 (Bolting Integrity); B-19 – B-21 (Boric Acid Corrosion); B-45 – B-50 (External Surfaces Monitoring Program); B-132 – B-133 (Selective Leaching); B-141 – B-150 (Structures Monitoring Program); B-153 – B-157 (Water Chemistry Control – Closed Treated Water Systems Program).

[193] *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-14, 55 NRC 278, 289 (2002).

In ¶¶ 20-21, Mr. Gundersen merely summarizes his statements from the previous four (4) paragraphs. He repeats his conclusions that Sequoyah lacks a site-specific AMP and that any AMP should address the design and operational flaws of a containment with an ice condenser.[194] The regulation in 10 C.F.R. § 2.309(f)(1)(v) requires a petitioner to "provide a concise statement of the alleged facts or expert opinion which support the requestor/petitioner's position[.]" The regulation in 10 C.F.R. § 2.309(f)(1)(vi) requires a petitioner to reference "specific portions of the application. . . that the petitioner disputes and the supporting reasons for each dispute" and in the event that a "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[.]" Since Mr. Gundersen fails to support his assertions regarding his review Sequoyah's license renewal application, his conclusory allegations are also insufficient to raise a valid contention. Thus, BREDL's Contention F-1 is inadmissible for failing to meet the requirements of 10 C.F.R. §.309(f)(1)(v) and (vi).

8. Contention F-2

a. Contention F-2 Fails to Raise a Genuine Issue for Adjudication

BREDL's Contention F-2 is premised on Mr. Gundersen's incorrect assertion that Sequoyah claimed that "the Sequoyah [Ice Condenser] containment can withstand severe accidents without leaking."[195] BREDL seems to base this contention on two quotes. The first quote comes from a Staff presentation to the Advisory Committee on Reactor Safeguards ("ACRS") on an unrelated issue and mischaracterizes the Staff's position. The second quote mischaracterizes the license renewal application.[196] Because Contention F-2 is erroneous, it

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[194] Gundersen Report at ¶¶ 20-21.

[195] Petition at 23.

[196] *Id.* at 24.

fails to raise a genuine dispute for adjudication and fails to meet the requirements of 10 C.F.R. § 2.309(f)(vi).[197] Accordingly, Contention F-1 should not be admitted.

i. BREDL's Mischaracterization of the Staff's and TVA's Statements Cannot Support an Admissible Contention

BREDL and Mr. Gundersen claim that the Staff has not "remedied its error or corrected its mistaken assumption that a nuclear containment building will not leak."[198] This claim ignores the context of the Staff's discussion with the ACRS and its actual meaning and, thus, mischaracterizes the Staff's position. The February 11, 2011, ACRS Committee meeting centered on the use of containment accident pressure when evaluating the performance of certain emergency cooling system performance during postulated accidents.[199] At the ACRS meeting, the Staff was presenting information on the impact of accounting for various pressure sources in containment during postulated accident conditions and their impact on the available net positive suction head ("NPSH") for certain installed pumps.[200] This was a discussion regarding pump performance during accident conditions and did not specifically reference Sequoyah or ice condensers. The ACRS and the Staff were discussing what credit, if any, should be given for containment accident pressure.[201]

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[197] *Private Fuel Storage*, CLI-4-22, 60 NRC 125, 136 (2004); *Georgia Institute of Technology* (Georgia Tech Research Reactor, LBP-95-6, 41 NRC 281, 300 (1995).

[198] Petition at 24. Gundersen Report at ¶ 23. BREDL's Petition cites the source of its quote as a document at ADAMS Accession No. ML110490121. The Staff has been unable to locate a document with the referenced number. After reviewing various ACRS meeting transcripts for BREDL's quotation, the Staff has identified a transcript for the February 11, 2011 ACRS Full Committee meeting as being the correct source of BREDL's quote. *See* ADAMS Accession No. ML110691233 at 69-70.

[199] February 11, 2011 ACRS Full Committee Meeting Transcript, ADAMS Accession No. ML110691233 at 65–66.

[200] *Id.* at 68–71.

[201] *Id.* at 67. Containment accident pressure is often referred to as "CAP." *See id.*

BREDL quotes only a portion for the staff's discussion of postulated accident conditions and, consequently, presents an incorrect interpretation of the Staff's position on the issue. The Staff's full statement makes clear that no representation was being made about the containment's performance under accident conditions; the Staff was, instead, discussing its assumptions for modeling a particular phenomenon for the purpose of determining whether certain pumps would operate. The Staff stated:

> Some operating PWRs also use some fraction of the total containment pressure in determining available NPSH. The yellow line shows the vapor pressure at the temperature of the PWR sump water. Some PWRs assume this vapor pressure in calculating available NPSH.
>
> While this is conservative for calculating available NPSH, since it ignores the air partial pressure, it does assume that the containment is leaktight. During the first part of a PWR accident, before switchover to the sump, the pumps are taking suction from the RWST, and the containment pressure is not important in determining available NPSH.[202]

As the full statement shows, the Staff was only discussing containment as being leaktight as an assumption for modeling the available NPSH and was not making any statement regarding containment leakage during accident conditions.[203] Thus, the Staff has not made any mistakes or errors with respect to representations on containment performance.

BREDL's interpretation of the second quote mischaracterizes Sequoyah's license renewal application. BREDL states:

> TVA's application for license extension at [Sequoyah] claims that for even "severe accidents," like the ones that occurred at Fukushima Daiichi, the Sequoyah containment would <u>retain all its radioactive fission products</u>.[204]

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[202] *Id.* at 69-70.

[203] *Id.*

[204] BREDL's Petition at 24.

BREDL also states:

> TVA has therefore claimed in its Sequoyah License Renewal Application that the [Ice Condenser] containment has the ability to withstand not simply design-basis events, but also **severe accidents**. According to [Mr.] Gundersen's expert witness report, submitted in support of this contention, there is no analysis within the LRA to support this claim.[205]

BREDL argues that a severe accident mitigation alternatives ("SAMA") analysis "must include details with the exact sequences of events proving that the [Sequoyah] Ice Condenser containment will withstand a severe accident without leaking any radiation."[206] In summary, BREDL claims that Sequoyah's application is deficient because the license renewal application does not provide a SAMA analysis showing that the containment would survive a severe accident without leaking any radiation.[207]

BREDL is incorrect when it asserts that TVA must provide detailed analysis and documentation showing that Sequoyah's containments "can withstand 'severe accidents' without leaking."[208] BREDL quotes the portion of the application that states: "The reactor containment is designed to adequately retain these fission products under the most <u>severe accident</u> conditions."[209] BREDL asserts that this should be read to mean that TVA is claiming that the Sequoyah containment will not leak, even under the most severe accident conditions. But this is simply not true and BREDL points to no requirement that the Applicant show that its containment will not leak under severe accident conditions. The license renewal application

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[205] *Id.* (emphasis in the original).

[206] *Id.* at 25.

[207] *Id.*

[208] *Id.* at 24-25.

[209] *Id.* at 24 (citing LRA at §1.2.2.2) (emphasis added by BREDL).

does not claim that containment is leaktight or that containment will prevent all possible radiological releases in the event of a severe accident.

In addition, contrary to BREDL's claims, Sequoyah's SAMA analysis specifically analyzes both design basis accidents and severe accidents. The severe accidents analyzed by the Applicant show the containment's potential performance during severe accident conditions, including the potential for containment failures and containment bypass events.[210]

Moreover, BREDL's claim is contrary to Sequoyah's Updated Final Safety Analysis Report ("UFSAR"). The UFSAR allows for some nominal containment leakage even during normal operating conditions.[211] The UFSAR states:

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[210] *See* Environmental Report, Appendix E, at E-69 – E-72, E-111 – E-115, E-118 – E-134.

[211] Sequoyah Nuclear Plant, Updated Final Safety Analysis Report ("UFSAR"), Amendment 23, at 3.1-8.

> Criterion 16 - Containment Design.
> Reactor containment and associated systems shall be provided to establish an essentially leaktight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.
>
> Compliance
> The reactor containment (subsection 6.2) is a freestanding, continuous steel membrane structure. The ice condenser inside containment (subsection 6.2) assists in limiting containment pressure to a value less than design pressure both during and after a LOCA. A concrete shield building, surrounding the steel vessel, *allows for collection of any containment leakage* which is subsequently processed by the Emergency Gas Treatment System (subsection 6.2) before release to the environment. A containment spray system (subsection 6.2), which supplements the ice condenser in limiting pressure, also provides long-term cooling following a LOCA. The design pressure is not exceeded in any pressure transients which result from combining the effects of heat sources with minimal operation of the Engineered Safety Features. The Containment System is designed to provide for protection of the public from the consequences of a LOCA based on a postulated break of the reactor coolant piping up to and including a double-ended break of the largest reactor coolant pipe. *Periodic leak rate measurements ensure that the containment barrier is maintained within regulatory limits.*

> Criterion 52 - Capability for Containment Leakage Rate Testing. The reactor containment and other equipment which may be subjected to containment test conditions shall be designed so that periodic integrated leakage rate testing can be conducted at containment design pressure.
>
> Compliance
> The reactor containment design permits overpressure strength testing during construction and permits preoperational integrated leakage rate testing at containment design pressure and at reduced pressure, in accordance to Appendix J, 10 CFR 50. The reactor containment and other equipment which may be subjected to containment test conditions are designed so that periodic integrated leakage rate testing can be conducted at containment design pressure. All equipment which may be subjected to the test pressure will either be vented to the containment, be removed from the containment during the test, or be designed to withstand the containment design pressure without damage.
>
> The preoperational integrated leak tests at peak pressure and at reduced pressure verify that the containment, including the isolation valves and the resilient penetration seals, *leaks less than the allowable value of 0.25 weight percent per day at peak pressure.*

Details concerning the conduct of periodic integrated leakage rate tests are in subsection 6.2.1.4.[212]

In light of the foregoing, BREDL's insistence that TVA demonstrate that its containment is leaktight is unsupported by the facts. As the UFSAR shows, containments are allowed to have a nominal leakage rate.

Mr. Gundersen's report provides no additional support for BREDL and proffers no information beyond the conclusory claims outlined in the petition. In paragraph 22, Mr.

(footnote continued)

Id. (emphasis added). Specifically, the containment has always been allowed a nominal rate of leakage that is monitored by testing.

[212] UFSAR, at 3.1-28 (emphasis added).

Gundersen states that events at Fukushima Dai-ichi prove that containments can fail.[213] This conclusion is unremarkable. The Staff has been aware that under certain conditions containments can fail for decades. The Staff continues to evaluate this information as new data becomes available.[214] The events at Fukushima Dai-ichi occurred at a different kind of reactor (a boiling water reactor instead of a pressurized water reactor) and utilized a different containment. Thus, the events at Fukushima Dai-ichi are not directly comparable to Sequoyah. In addition, as Mr. Gundersen has not shown how the events at Fukushima Dai-ichi are relevant to Sequoyah, he has failed to establish a nexus between the two sufficient to support a genuine issue for adjudication.

In addition to the plain language of the license renewal application quoted by BREDL and Mr. Gundersen, Sequoyah's environmental report also demonstrates that Sequoyah makes no claims regarding whether the containment would retain all radioactive isotopes during a severe accident. In fact, the environmental report indicates otherwise. In Appendix E to the environmental report, Sequoyah provides a detail discussion of various accident scenarios, including severe accidents, resulting in containment failure or bypass.[215] As part of its SAMA analysis, Sequoyah calculates the likely consequences of these accident scenarios and the potential benefit from potential accident mitigation measures.[216]

BREDL and its expert misread or misinterpreted the plain language in Sequoyah's license renewal application and environmental report. It is well-established that an intervenor's

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[213] Gundersen Report at ¶ 22.

[214] *See. e.g.,* Order To Modify Licenses With Regard To Reliable Hardened Containment Vents, EA-12-050, (March 12, 2012)

[215] *See* Environmental Report, Appendix E, at E-69 – E-72.

[216] *Id.* at E-111 –E-115, E-118 – E-134.

imprecise reading of a license renewal application cannot generate an admissible contention.[217] Similarly, proposed contentions based on factually inaccurate assertions are not admissible.[218] Thus, BREDL's proposed contention F-2 is inadmissible for failing to raise a material dispute with the application.

9. Contention F-3

a. Containment Contention F-3: Accuracy of Information Is Compromised

> TVA's long standing breakdown in dealing with the mismanagement of its whistleblower complaints is a reflection of the corporation's lack of integrity and insufficient adherence to regulatory statutes that demand nuclear power owners put safety first. Given these ongoing systematic problems[,] the accuracy and validity of the License Renewal Application cannot be assured and therefore must be rejected.[219]

This contention claims that longstanding and ongoing mismanagement of whistleblower complaints reflects TVA's lack of integrity and an inadequate safety culture and warrants rejection of the Application as inaccurate until a third party assessment of plant safety is completed.[220] Petitioners assert that because the Sequoyah Ice Condenser Containment design is "less robust than other containments," (a) plant personnel must be "free from harassment," discrimination and retaliation against whistleblowers that is detrimental to safe operation and (b) TVA's record indicates a "chilling effect on the continued safe operation of the [SQN] Ice Condenser containment."[221] Petitioner cites: 1) the "rising number of allegations" during the 2012 steam generator replacement; 2) the necessity for continued NRC oversight

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[217] *Georgia Institute of Technology* (Georgia Tech Research Reactor), LBP-95-6, 41 NRC 281, 300 (1995).

[218] *Private Fuel Storage*, CLI-4-22, 60 NRC 125, 136 (2004).

[219] Petition at 25. *See* Gundersen Report at 12.

[220] Petition at 25-27

[221] *Id.* at 25.

even though TVA instituted a corrective action plan; and 3) TVA whistleblower concerns over more than 10 years that continue.[222]

Petitioners argue "ongoing" safety concern are illustrated by (1) statements in a 2001 letter regarding a late 1990s enforcement action indicating "'continued harassment of Mr. Overall for reporting [ice condenser problems] internally and externally, including actions so severe that they drove him off the job site;[223] (2) "TVA's practices regarding managers who discriminated and retaliated against nuclear whistleblowers by the Department of Labor in the past,'"[224] and (3) a news report on NRC's tracking of whistleblower complaints in 2012.[225] Petitioners do not cite any expert testimony, but reflect Mr. Gundersen's the opinion (appended in a report) that TVA's whistleblower history and "targeting" of containment design personnel require an independent assessment of the accuracy of ice condenser containment data, rejection of the renewal application until that occurs, and that whistleblower harassment and intimidation places the veracity of TVA's renewal application in doubt.[226]

Although safety culture and management integrity are important issues, the contention is not admissible given the narrow scope of license renewal proceedings. Safety culture is defined as "the core values and behaviors resulting from a collective commitment by leaders and

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[222] *Id*. at 25-26 (citing Allegation Program — 2012 Annual Trends Report (April 29, 2013) ("2012 Trend Report") (ADAMS Accession No. ML13115A953).

[223] Petition at 26 (quoting Letter from Lynne Bernabi, to Loren Plisco, NRC Region II, Re: EA-98-327, Apparent Violations of Employee Discrimination Requirements (U.S. Department of Labor Case No. 1997-ERA-0053) (July 2, 2001) ("Bernabi Letter") (ML012320261)).

[224] Id. at 26 (citing Bernabi Letter).

[225] Petition at 26-27 (quoting Associated Press, *Sequoyah, Watts Bar nuclear plants among top 5 in internal complaints say regulators*, May 3, 2013. Staff Counsel found the link to this article to be inactive. The quoted language does appear at http://wsbtv.com/ap/ap/northe-caroline/tvas-sequoyah-watts-bar-among-tops-in-complaints/nXgFB/.

[226] *See* Petition at 25-27; Gundersen Report at 11-12.

individuals to emphasize safety over competing goals to ensure the protection of people and the environment."[227] The Safety Culture Policy Statement is part to the Commission's long emphasis on a safety-first focus and the importance of the development and maintenance of a positive safety culture for all regulated activities.[228] Positive traits include the planning and controlling of work activities in a manner that maintains safety and maintaining an environment where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment, or discrimination.[229]

Petitioners do not show how their concerns relate to the renewed period of operation and "managing age-related degradation of systems, structures and components that are important to license renewal."[230] In promulgating 10 C.F.R. Part 54, the Commission stated that "'license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to [our] ongoing compliance oversight activity.'"[231]

In *Prairie Island,* the Commission ruled that Broad-based issues such as safety culture, "operational history, quality assurance, quality control, management competence, and human factors—were beyond the bounds of a license renewal proceeding."[232] The Commission rejected the proposition that it should consider "'whether there was any condition, act or practice that occurred during the period of initial licensing that would affect the period of extended

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[227] Final Safety Culture Policy Statement, 76 Fed. Reg. 34,773 (June 14, 2001) (Safety Culture Policy Statement).

[228] *Id*. at 34,774.

[229] *Id.* at 34,777-34,778.

[230] 1991 Renewal Rule, 56 Fed. Reg. at 63,946.

[231] *Prairie Island*, CLI-10-27, 72 NRC at 490 (citing 1991 Renewal Rule, 56 Fed. Reg. at 64,052..

[232] *Id.* at 491.

operation.'"[233] The Commission declined to admit a contention that relies on ongoing operational matters to raise a safety culture issue, in part, because it could result in an unending stream of minitrials on operational issues and an "unending series of revised contentions" proffered with each new inspection report or notice violation.[234] In addition, the contention (that cites examples of poor safety culture for a decade and recent noncompliances as preventing a finding that the applicant would manage the effects of aging during the period of extended operation) was retrospective in nature, outside the scope of license renewal, and raises issues already addressed by existing NRC regulatory processes.[235] The request for a third party assessment of the plant's safety culture to allay concerns about reasonable assurance and the viability of the renewal application raised current operation concerns that did not address operation during the renewal period.[236]

In *Diablo Canyon,* Commission found that a contention alleging that a renewal applicant failed to show how it would "address and rectify an ongoing pattern of management failures with respect to operation and maintenance of equipment" generally related to current operation and fell outside the scope of a renewal proceeding.[237] The contention also failed to show a genuine dispute with the application because it did not identify or address any particular aspect of the aging management review, integrated plant assessment or aging management program as deficient, thus leaving the Board to guess at the deficiencies in the application.[238]

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[233] *Id.* (citing 60 Fed. Reg. at 22,485).

[234] *Id.* at 491.

[235] *See Prairie Island*, CLI-10-27, 72 NRC at 484-86, 490-93.

[236] *Id.* at 486, 492.

[237] *Diablo Canyon*, CLI-11-11, 72 NRC 427, 432-37.

[238] *Id*. at 436-37.

While Petitioners ask the NRC to "reject" the renewal application until a third party assessment of plant safety is performed and express concern about the ice condenser containment design.[239] Petitioners, like the contention sponsors in *Diablo Canyon* and *Prairie Island,* raise general concerns about current operations and seek to expand this renewal proceeding to include matters effectively addressed by ongoing NRC regulatory oversight. Petitioners thus fail to demonstrate that the issue raised is within the scope of the proceedings or is material to findings the NRC must make to support the proposed action as required by 10 C.F.R. § 2.309(f)(1)(iii) and (iv), respectively.

General assertions of inaccuracies in the Application do not suffice and do not put the parties on notice as to the matter raised. Given that Petitioners generally assert concerns about inaccuracies and do not reference specific portions of the application, they do not provide support a genuine dispute on a material issue with respect to the Application pursuant to 10 C.F.R. § 2.309(f)(vi).

Petitioners also fail to show that their safety culture and management integrity concerns relate to the renewal application and are not merely retrospective in nature. *See Prairie Island*, 72 NRC at 491. They make no showing that the management personnel involved in whistleblower activities are currently employed at Sequoyah or participated in the preparation of the renewal application. They merely cite operational performance issues and conclude that TVA lacks management integrity. Consequently, Petitioners apparently have generalized concerns about TVA's safety culture and integrity that fail to raise a matter within the scope of the proceeding, fail to identify an issue the material issue the NRC must address to support the action and fail to raise a genuine dispute with the applicant, or relate to current operations.

To the extent that Petitioners' concerns are grounded upon "continuing harassment of

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[239] *See* Petition at 25-27.

Mr. Overall," the documents they cite, do not support the proposition that harassment of Mr. Overall (then a Watts Bar employee, but employed at Sequoyah in the early 1980s) continues today since the Bernabi letter is over a decade old.[240] Petitioners fail to proffer any showing that the personnel involved in "harassment" activities are employed at Sequoyah. Although a board "may view a petitioner's supporting information in a light favorable to the petitioner, it cannot do so by ignoring . . . contention admissibility rules, which require the petitioner (not the board) to supply all of the required elements for a valid intervention petition."[241] Similarly, "[a] licensing board is not free to supply missing information or draw factual inferences on the petitioner's behalf."[242] Thus, general assertions of application inaccuracies or management lacking the requisite integrity are speculative, fail to satisfy 10 C.F.R. § 2.309(f)(1)(v) and are not admissible.

While important, general concerns about safety culture, management integrity, and the "accuracy and validity of the renewal application" are an attempt to engage in a broad inquiry regarding the facility's compliance that improperly expands the scope of this proceeding and should be rejected.[243] Such matters are effectively addressed by regulatory processes that continuously reassess whether additional oversight or regulatory action is needed. [244] Thus, the contention raises an issue outside the scope of a license renewal proceeding, lacks an adequate documentary support for the proposition proffered, fails to raise an issue material to

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[240] *See* Bernabi Letter at 1-2 and Exhibit 1 (Declaration of Curtis C. Overall) at ¶¶ 4 - 12.

[241] *Oyster Creek*, CLI-90-07, 69 NRC 235, 260 (2009).

[242] *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 53 NRC 403, 422 (2001) (citing *Arizona Public Service Co.* (Palo Verde Nuclear Generating Stations, Units1, 2, and 3), CLI-91-12, 34 NRC 149, 154).

[243] *See Prairie Island*, 72 NRC at 490-92.

[244] *Id.* at 492.

findings the NRC must make, and fails to show a general dispute with the Applicant on a material issue of law or fact as required by 10 C.F.R. § 2.309(f)(1)(iii) - (vi).

The Commission has previously concluded that a petitioner's generalized assertions that current management will be in place during the period of extended operation and aging issues will be "more 'difficult to manage' than current issues," without explaining the relevancy of its assertions to management of the effects of aging during the renewal period are not sufficient to support admission of a management competence contention.[245] The Board and parties should not have to guess at the nature of the deficiencies in the AMPs or how those deficiencies might affect a reasonable assurance finding under 10 C.F.R. § 54.29(a).[246] An expert opinion that merely states a conclusion (e.g., that an application is deficient, inadequate or wrong) with providing a reasoned basis or explanation is inadequate because it deprives the Board of the ability to assess the opinion.[247]

Petitioners' assertion that TVA "mismanagement" indicates the corporation's lack of "integrity" is based on their expert's opinion and recitation of past performance problems and a late 1990s enforcement action. Petitioners note the increase in allegation received at Sequoyah and other TVA plants.[248] Petitioners, however, fail to mention that the report and the cover memo conclude that the allegation trends "do not suggest a concern about the environment for raising concerns" and a survey a 2011 survey (with a 60 percent participation rate) at Sequoyah

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[245] *Diablo Canyon*, CLI-11-11, 74 NRC 427, 436 (2011) (counsel couldn't explain how unidentified problems with AMPs, did not identify problems with current mgmt., did not explain "how unidentified problems might undermine one or more of . . . proposed [AMPs]") *Id*. at 436-37.

[246] *Id*. at 437.

[247] *USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (quoting Private Fuels Storage, L.L.C. (Independent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181, *aff'd on other grounds*, CLI-98-12, 48 NRC 26 (1998)).

[248] *See* Petition at 25-27; Gundersen Report at 11. *See also* 2012 Allegations Trend Report at 1-2, 10, 15.

indicates improvement in safety conscious work environment and employee concern program ratings.[249] Because Petitioner's documentation does not support their position, the contention does not meet 10 C.F.R. § 2.309(f)(v).[250]

Prior Commission rulings also cast doubt as to whether the management integrity portion of the contention is admissible. In rejecting a management competence contention, the Commission distinguished the limited scope, power reactor, license renewal review from the "essentially fresh operating license review done for a research reactor" where it upheld admission of a management integrity contention.[251] The Commission stated that 10 C.F.R. Part 54 does not apply to test reactors.[252]

Also, *U.S. Dept. of Energy*, (High-Level Waste Repository) CLI-09-14, 69 NRC 580, 604 (2009), the Commission ruled that the statute designating DOE responsible for construction and operation of the facility precluded consideration of the overall management integrity and competence of the applicant. For example, The Commission relied on specifics such as references to a serious incident involving reactor shutdown, "the fact that management responsible for the incident remained in place, a purported climate of reprisals for bringing forward safety issues," and a reference to an expert witness who supported certain assertions to admit a management integrity contention in a test reactor renewal proceeding.[253] Their concerns must be more than historical interest.[254] The Commission noted that litigation of

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[249] *Compare* Petition at 25-27 *with* Allegation Trend Report at 2, 15.

[250] *See* 10 C.F.R. § 2.309(f)(v).

[251] *Diablo Canyon,* CLI-11-11, 74 NRC at 436 n.47 (citations omitted).

[252] *Id.*

[253] *See Diablo Canyon,*CLI-11-11, 74 NRC at 436 (distinguishing *Georgia Tech*, CLI-95-12, 42 NRC 111 (1995).

[254] *Id.* at 436 (citing *Georgia Tech,* CLI-95-12, 42 NRC 111, 118-22 (1995).

whether an agency of the federal government possesses the character or competence is different than NRC consideration of such matters done by a private enterprise, not under the government's control.[255] The Commission concluded that the legislative history of section 182.a of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2232, indicates that a Commission decision on an applicant's character was to ensure that otherwise unknown *private* applicants possessed the requisite character to be licensed.[256] Accordingly, NRC scrutiny of the application need not go beyond the adequacy of the application itself and inquire broadly into DOE's integrity.[257]

TVA describes itself as an agency of the U.S. government and a corporation owned by the U. S. government. The statute creating TVA provides that it is a "corporation" that, among other things, has the power in the name of the United States to exercise the right of eminent domain, and is entrusted as the agent of the United States to accomplish purposes under the act.[258] Given TVA's quasi-governmental status, it would appear that admission of a contention challenging its management integrity is not appropriate.

In sum, Petitioners have not proffered an issue within the scope of the proceeding, provided alleged facts or opinion together with specific reference that support their position, demonstrated that the contention raises an issue material to NRC license renewal findings or raised a genuine dispute with the applicant (by references to the application) as to a material issue. Therefore, the contention does not satisfy the requirements of 10 C.F.R. §

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[255] *U.S. Dept. of Energy*, CLI-09-14, 69 NRC at 605.

[256] *Id.* at 605 (citations omitted).

[257] *Id.* at 606-07.

[258] Tennessee Valley Authority Act of 1933, 16 U.S.C. §§ 831 and 832. TVA is also listed on the LRA at sections 1.1.3 – 1.1.4. TVA is also appears in the listing of independent agencies and government corporations on U.S.A.gov.

2.309(f)(1)(iii)-(vi) and is inadmissible.

To extent Petitioners are concerned about management competence that merits immediate action, they should file a 10 C.F.R. § 2.2.06 petition.[259] Further, any concerns about the accuracy and completeness of information submitted by TVA would be addressed by the NRC regulatory processes, including whether TVA violated 10 C.F.R. § 50.59.

10. BREDL's Claims That Are Common to Multiple Contentions

In its Petition, BREDL raises several issues that it asserts are relevant to multiple contentions. These issues are identified, but not discussed. Accordingly, they are vague and unsupported.[260] Some of the issues misstate the law or the facts and are inadmissible for that reason, as well.[261]

First, BREDL asserts that TVA must demonstrate that it can continue to run [Sequoyah] without failure and that TVA has failed to make that demonstration with respect to at least 15 enumerated structures and components.[262] This claim misstates the law. The regulation in 10 C.F.R. § 54.29 provides that a renewed license may be issued if "there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB[.]" The standard does not include a guarantee against failure; it focusses instead on reasonable assurance of operations consistent with the current licensing basis. A petitioner's misreading of the law cannot generate an admissible contention.[263]

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[259] *See, e.g., Diablo Canyon*, 74 NRC at 437.

[260] 10 C.F.R. § 2.309(f)(1)(v) and (vi).

[261] 10 C.F.R. § 2.309(f)(1)(vi).

[262] Petition at 7-8.

[263] *Diablo Canyon*, CLI-11-11, 74 NRC at 457.

In addition, BREDL lists 15 separate structures and components and claims that the Applicant has not demonstrated that these structures and components will not fail.[264] Not only does BREDL misstate the law,[265] its claim fails for lack of specificity and support. BREDL does not cite to any portion of the license renewal application for these structures and components and does not identify any deficiency in the application with respect to them.[266] Moreover, while BREDL refers to its Contentions F1, F2, and F3, BREDL does not explain how the following structures and components relate to the ice condenser or the ice condenser containment: the reactor vessel, the reactor coolant system pressure boundary, steam generators, core shroud, pressure retaining boundaries, heat exchangers, ventilation ducts, containment liner, electrical and mechanical penetrations, equipment hatches, seismic Category I structures, and electrical cables and connections. "[S]imply attaching material or documents as a basis for a contention, without setting forth an explanation of that information's significance, is inadequate to support the admission of the contention."[267] Thus, if this were to be considered as a contention, it would be inadmissible for lack of specificity and support and for failure to raise a genuine issue of law.

Next, BREDL claims that the Sequoyah license renewal application fails to provide time-limited aging analyses.[268] BREDL is mistaken, again; time-limited aging analyses are in the license renewal application in Section 4, which devotes approximately 50 pages to a discussion

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[264] Petition at 8.

[265] 10 C.F.R. § 54.29.

[266] *Pa'ina Hawaii, LLC,* LBP-06-12, 63 NRC 403, 409-10 (2006) (contention denied for failure to allege deficiency in design and for unsupported allegation that application lacked emergency procedures).

[267] *Bellefonte,* LBP-10-7, 71 NRC at 420; *Carolina Power & Light Co*. (Shearon Harris Nuclear Power Plant, Unit 1), LBP-07-11, 66 NRC 41, 58 (2007).

[268] Petition at 8.

of these analyses.[269] If, as here, a petitioner mistakenly asserts that an application does not address an issue and the application does, in fact, address that issue, the petitioner's claim is subject to dismissal.[270]

With respect to the Applicant's Environmental Report, BREDL appears to argue that the report does not "truly" address the effect of license renewal on low income populations.[271] However, BREDL makes only a brief reference to low income populations and does not explain what is wrong with the Environmental Report and does not cite any portion of it. Furthermore, the Applicant identifies low income populations in Section 2.6.2[272] of the license renewal application and discusses impacts to those populations in Section 4.22.[273] Thus, if this were a contention, it would be inadmissible for lack of specificity and support and failure to raise a genuine issue.

To the extent that BREDL is claiming that the Environmental Report should address "the human health effects of low dose exposures … and the full effect of cancer-causing agents emitted to the environment[,]"[274] BREDL raises issues that are beyond the scope of this proceeding. The Commission has dealt with these issues generically in the GEIS, and has determined that for all plants, radiological releases during the license renewal period will have

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[269] Sequoyah License Renewal Application, Section 4, pp. 4.1-1 through 4.7-3 (ADAMS Accession No. ML13024A011).

[270] *Georgia Tech,* LBP-95-6, 41 NRC at 300.

[271] Petition at 9.

[272] License Renewal Application, Section 2.6.2, pp. 2-106 through 123 (ADAMS Accession No. ML13024A013) and pp. 2-124 through 140 (ADAMS Accession No. ML13024A006).

[273] License Renewal Application, Section 4.22, pp. 4-67 through 69 (ADAMS Accession No. ML13024A007).

[274] Petition at 9.

only a small impact on human health.[275] As explained above, the Commission's generic determination is not subject to challenge in this proceeding.

Finally, BREDL refers to mental stress[276] and appears to be asserting that the Environmental Report should address the mental stress that license renewal poses to populations living with the risks associated with low dose exposure. This approach was rejected decades ago by the Supreme Court in *Metropolitan Edison Co. v. People Against Nuclear Energy*.[277] The Court rejected the notion that damage to psychological health stemming from the risk of living near a nuclear plant was a cognizable effect under NEPA.[278] The Court held that psychological damage was "simply too remote from the physical environment to justify requiring the NRC to evaluate the psychological health damage to these people that may be caused by renewed operation of [the plant][279] and concluded that "the element of risk lengthens the causal chain beyond the reach of NEPA."[280] BREDL's claim regarding mental stress, thus, does not raise a genuine issue of law.

CONCLUSION

BEST and MATRR have not demonstrated standing to intervene in this proceeding. The Staff does not contest BREDL's standing to intervene; however, in order to be admitted as a

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[275] 10 C.F.R. Part 51, Subpart A, Appendix B, Table B-1.

[276] Petition at 9.

[277] *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766 (1983).

[278] *Id.* at 774-76. As the Commission recognized, ("NEPA is not intended to encompass every possible impacts, and does not encompass potential losses due to individuals' 'perception of a risk.'" *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-12-15, ___ NRC ___, ___ (June 7, 2012) (slip op. at 28)).

[279] *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. at 774.

[280] *Id*. at 776.

party, BREDL must also proffer an admissible contention. With the exception of Contention B, BREDL has failed to submit admissible contentions and, but for Contention B, BREDL's petition for intervention and request for hearing should be denied. Because Contention B raises issues regarding Waste Confidence, Contention B should be held in abeyance in accordance with the Commission's instruction in the *Calvert Cliffs* Order.[281] The parties' obligations regarding hearing files and mandatory disclosures should also be held in abeyance.

Respectfully submitted,

/Signed (electronically) by/
Beth N. Mizuno
Counsel for NRC Staff
U.S. Nuclear Regulatory Commission
Office of General Counsel
Mail Stop O-15 D21
Washington, DC 20555
Telephone: (301) 415-3122
E-mail: Beth.Mizuno@nrc.gov

Executed in accordance w/ 10 CFR 2.304(d)

Mitzi A. Young
Counsel for NRC Staff
mitzi.young@nrc.gov

Executed in accordance w/ 10 CFR 2.304(d)

Brian G. Harris
Counsel for NRC Staff
brian.harris@nrc.gov

Executed in accordance w/ 10 CFR 2.304(d)

Christina L. England
Counsel for NRC Staff
christina.england@nrc.gov

Dated at Rockville, Maryland
this 3rd day of June, 2013

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[281] *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-12-16, 76 NRC __ (Aug. 7, 2012) (slip op. at 6). Should a hearing on Contention B be held, the Staff maintains that, consistent with 10 C.F.R. § 2.310(a), such a hearing should be conducted under the provisions of 10 C.F.R. Part 2, Subpart L. *See* Changes to Adjudicatory Process, Final Rule, 69 Fed. Reg. 2,182, 2,222 (Jan. 14, 2004).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
TENNESSEE VALLEY AUTHORITY	)	Docket Nos. 50-327-LR & 50-328-LR
	)	
(Sequoyah Nuclear Plant, Units 1 and 2)	)	
	)	
	)	

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R § 2.305 (revised), I hereby certify that "NRC STAFF ANSWER TO PETITION FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING BY THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE, BELLEFONTE EFFICIENCY AND SUSTAINABILITY TEAM, AND MOTHERS AGAINST TENNESSEE RIVER RADIATION (ERRATA)" in the above-captioned proceeding have been served upon the Electronic Information Exchange, the NRC's E-Filing System, this 3rd day of June, 2013:

/Signed (electronically) by/

Beth N. Mizuno
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Office of General Counsel
Mail Stop O-15 D21
Washington, DC 20555
Telephone: (301) 415-3122
E-mail: Beth.Mizuno@nrc.gov