

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL

In the Matter of)
)
DUKE ENERGY CAROLINAS, LLC,)
) Docket Nos. 52-018 and 52-019
(William States Lee III Nuclear Station)
Units 1 and 2)

NRC STAFF ANSWER TO INTERVENORS' MOTION TO ADMIT NEW CONTENTION
REGARDING THE SAFETY AND ENVIRONMENTAL IMPLICATIONS OF THE NRC TASK
FORCE REPORT ON THE FUKUSHIMA DAI-ICHI ACCIDENT

INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the staff (Staff) of the Nuclear Regulatory Commission (NRC or Commission) hereby answers the Blue Ridge Environmental Defense League (BREDL) "Motion to Admit New Contention Regarding the Safety and Environmental Implications of the Nuclear Regulatory Commission Task Force Report on the Fukushima Dai-ichi Accident" (Motion or Proposed Contention), filed in the William States Lee III Units 1 and 2 (Lee) combined license (COL) proceeding. The Staff does not contest BREDL's standing,¹ but, for the reasons set forth below, opposes reopening the proceeding and admitting the proposed contention because BREDL has not satisfied the reopening standards and because the proposed contention is inadmissible.

PROCEDURAL BACKGROUND

On December 12, 2007, Duke Energy Carolinas, LLC (Duke or Applicant) submitted an application for COLs for two AP1000 Advanced Passive Pressurized Water reactors to be located in Cherokee County, South Carolina. Duke Energy Carolinas; Notice of Receipt and

¹ BREDL had previously demonstrated representational standing prior to the closure of the Lee proceeding. It has properly submitted affidavits from interested individuals to again demonstrate standing.

Availability of Application for a Combined License, 73 Fed. Reg. 6218 (Feb. 1, 2008). The proposed units will be known as William States Lee III Nuclear Station, Units 1 and 2. *Id.*

In response to the Notice of Hearing on the Application,² published on April 28, 2008, BREDL submitted a “Petition for Intervention and Request for Hearing” on June 27, 2008. On September 22, 2008, the Board issued a Memorandum and Order finding that BREDL had demonstrated standing but had not submitted an admissible contention. *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC 431 (2008). Accordingly, the Board denied BREDL’s request for an evidentiary hearing. *Id.* at 435.

On April 18, 2011, BREDL filed an “Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident” (Emergency Petition) before the Commission. The Staff and Applicant filed answers to the Emergency Petition on May 2, 2011. The Commission has not yet issued a ruling on the Emergency Petition.

On Aug. 11, 2011, BREDL filed a “Motion to Admit Contention Regarding the Safety and Environmental Implications of the [NRC] Task Force Report on the Fukushima Dai-ichi Accident.” Along with their motion, BREDL filed a “Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report.” Although the heading of its Certificate of Service refers to a “Motion to Reopen,” BREDL did not include in its filing a document entitled “Motion to Reopen” or any reference to the reopening standards of 10 C.F.R. § 2.326. On August 18, 2011, the Commission issued an Order referring BREDL’s motion and new contention to the Atomic Safety and Licensing Board Panel (ASLBP) for appropriate action. Order (Referring Motions to the ASLBP) (Aug. 18, 2011) (unpublished) (ADAMS Accession No. ML11230B325).

LEGAL STANDARDS

A. Contention Admissibility

² 73 Fed. Reg. 22,978 (Apr. 28, 2008).

The admissibility of new and amended contentions is governed by 10 C.F.R.

§ 2.309(f)(2) and 2.309(f)(1). New or amended contentions filed after the initial filing period may be admitted only with leave of the presiding officer if, in accordance with 10 C.F.R. § 2.309(f)(2), the contention meets the following requirements:

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

10 C.F.R. § 2.309(f)(2)(i)-(iii).

Additionally, a new or amended contention must also meet the general contention admissibility requirements of 10 C.F.R. § 2.309(f)(1). *Id.* In accordance with 10 C.F.R. § 2.309(f)(1), an admissible contention 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;
- (vi) . . . provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as

required by law, the identification of each failure and the supporting reasons for the petitioner's belief. . . .

10 C.F.R. § 2.309(f)(1)(i)-(vi). The Commission has emphasized that the rules on contention admissibility are “strict by design.” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), *petition for reconsideration denied*, CLI-02-01, 55 NRC 1 (2002). Failure to comply with any of these requirements is grounds for the dismissal of a contention. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999). “Mere ‘notice pleading’ does not suffice.” *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006) (internal quotation omitted).

Finally, a contention that does not qualify for admission as a new contention under § 2.309(f)(2) may still be admitted if it meets the provisions governing nontimely contentions set forth in 10 C.F.R. § 2.309(c)(1).³ Pursuant to 10 C.F.R. § 2.309(c)(2), each of the factors is required to be addressed in the requestor’s nontimely filing. The first factor, whether good cause exists for the failure to file on time, is the “most important” and entitled to the most weight. *Amergen Energy Co., LLC* (License Renewal for Oyster Creek Nuclear Generating Station),

³ 10 C.F.R. § 2.309(c)(1) requires a balancing of the following factors to the extent that they apply to a particular nontimely filing:

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

10 C.F.R. § 2.309(c)(1)(i)-(viii).

CLI-09-07, 69 NRC 235, 261 (2009). Where there is no showing of good cause for lateness, “petitioner’s demonstration on the other factors must be particularly strong.” *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Units 1 & 2), CLI-92-12, 36 NRC 62, 73 (1992) (quoting Duke Power Co. (Perkins Nuclear Station, Units 1, 2 & 3), ALAB-431, 6 NRC 460, 462 (1977)).

B. Reopening Standards

The Commission has stated that a petitioner seeking to introduce a new contention after the record has been closed should “address the reopening standards contemporaneously with a late-filed intervention petition, which must satisfy the standards for both contention admissibility and late filing.” *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 124 (2009). Section 2.326(a) of the Commission’s regulations sets forth the reopening standards. Specifically, this section states:

A motion to reopen a closed proceeding to consider additional evidence will not be granted unless the following criteria are satisfied:

- (1) The motion must be timely. However, an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented;
- (2) The motion must address a significant safety or environmental issue, and
- (3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.

10 CFR § 2.326(a).

The Commission has held that “the standard for admitting a contention after the record is closed is higher than for an ordinary late-filed contention.” *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005). In the context of an environmental issue, the motion to reopen standard is analogous to the standard for requiring a supplemental EIS. See *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 27 (2006). The NRC staff must prepare a supplement to a final environmental impact statement if: “(1) [t]here are substantial changes in

the proposed action that are relevant to environmental concerns; or (2) [t]here are new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 10 CFR § 51.92(a)(1)-(2). Any “new information must paint a ‘*seriously*’ different picture of the environmental landscape.” *PFS*, CLI-06-3, 63 NRC at 28, quoting *National Committee for the New River, Inc. v. Fed. Energy Regulatory Comm’n*, 373 F.3d 1323, 1330 (D.C. Cir. 2004) (emphasis in original).

DISCUSSION

According to BREDL, the Proposed Contention is based on a conclusion in the Task Force Report (ADAMS Accession No. ML111861807) that the level of protection currently provided by NRC regulations is inadequate to ensure protection of public health, safety, and the environment. Proposed Contention at 3; see *also* Second Makhijani Declaration ¶ 11. From this starting point, BREDL argues that “[t]he conclusions and recommendations presented in the Task Force Report constitute ‘new and significant information,’ the environmental implications of which must be considered before the NRC may make a decision” on any new reactor licensing. Proposed Contention at 11-12. BREDL therefore claims that any conclusions in environmental documents associated with the Lee COL application must be revisited, because compliance with NRC safety regulations is no longer sufficient to ensure that environmental impacts of accidents are acceptable. *Id.* at 12-13; see *also* Second Makhijani Declaration ¶ 11.

BREDL also makes several distinct claims regarding both the content of the Task Force Report and the deficiencies they allege in environmental documents issued in COL proceedings. First, BREDL claims that new reactor environmental licensing documents do not adequately address the environmental analysis of design basis accidents, severe accidents, and severe accident mitigation alternatives (“SAMAs”). Proposed Contention at 13-15. Second, BREDL asserts that the Task Force Report requires supplementation of environmental documents in the Lee proceeding to address recommendations related to seismic and flooding events. *Id.* at 16-18. Finally, BREDL argues that all twelve recommendations in the Task Force Report be

considered in the Lee environmental review before licensing decisions are made. *Id.* at 16-20. Notably, however, BREDL does not discuss the threshold question of how it satisfies the standards to reopen the proceeding.

As further discussed below, the Proposed Contention is barred to the extent that it challenges existing NRC safety regulations, is not supported by the Task Force Report with respect to severe accident analyses under NEPA, and includes several additional claims that are not supported by the Task Force Report. For these reasons and others discussed below, it fails to satisfy the contention pleading rules in 10 C.F.R. §§ 2.309, 2.326, and 2.335 and should be rejected.

I. BREDL NEITHER ADDRESSES NOR SATISFIES THE STANDARDS TO REOPEN THE PROCEEDING

Although the Lee proceeding was closed by the Board, BREDL does not attempt to address the reopening standards as it must under 10 C.F.R. § 2.326. But even overlooking this failure, it is apparent that BREDL's Proposed Contention does not satisfy these heightened standards. BREDL does not meet the reopening standards outlined in section 2.326(a)(2)-(3) because its Proposed Contention does not address a significant environmental issue, nor does it demonstrate that a materially different result would be likely if BREDL's new contention had been raised at the beginning of the proceeding. Moreover, BREDL has not demonstrated how the environmental impacts of the proposed action would be altered at all, much less how there are substantial changes in the proposed action or new and significant circumstances or information relevant to environmental concerns that have bearing on the proposed action. See 10 CFR 51.92(a)(1)-(2).

The Task Force Report specifically states that "in light of the low likelihood of an event beyond the design basis of a U.S. nuclear power plant and the current mitigation capabilities at those facilities . . . continued operation and continued licensing activities do not pose an imminent risk to the public health and safety." Task Force Report at 18, 73. Moreover, the Task

Force Report concludes that “the current regulatory approach and regulatory requirements continue to serve as a basis for the reasonable assurance of adequate protection of public health and safety until the [recommended actions] have been implemented.” *Id.* at 73. BREDL simply asserts that the environmental implications of the Task Force Report should be considered without indicating what any of those environmental implications would actually be. Thus, BREDL does not raise a significant environmental issue because it has not shown that the current analysis contained in the ER is inadequate and would need to be supplemented.

BREDL’s claim that the imposition of SAMAs may result in the denial of licenses and higher costs similarly does not raise a significant environmental issue because it is based on an inaccurate premise, namely that the Task Force Report recommends imposition of SAMAs. As further discussed below in section III, the Task Force Report simply does not make such a recommendation. Moreover, even if additional measures were imposed, the Petitioners have not shown how this Applicant would be unable to comply with them such that their license would be denied, or that the costs of compliance would be so great so as to materially alter the environmental impacts.

As discussed above, BREDL has failed to address, and would not meet if it had addressed, the reopening standards of 10 C.F.R. § 2.326. Accordingly, BREDL’s Motion should be denied.

II. TO THE EXTENT THE PROPOSED CONTENTION CHALLENGES EXISTING SAFETY REGULATIONS, IT IS BARRED BY NRC REGULATIONS

The Proposed Contention is styled as a contention regarding both the safety and environmental implications of the Task Force Report. Proposed Contention at 1. According to BREDL, “[t]he NRC’s current regulatory scheme requires significant re-evaluation and revision in order to expand or upgrade the design basis for reactor safety as recommended by the Task Force Report.” *Id.* at 9. BREDL also challenges 10 C.F.R. §§ 52.47(a)(23) and 52.79(a)(38), apparently on the grounds that these regulations are subject to cost-benefit analysis. *Id.* at 8.

To the extent the Proposed Contention is intended to challenge existing NRC safety regulations, it is barred from consideration in adjudicatory proceedings by 10 C.F.R. § 2.335(a). Pursuant to this regulation, “no rule or regulation of the Commission, or any provision thereof . . . is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding subject to this part.” 10 C.F.R. § 2.335(a). Petitioners seeking a waiver of this rule in a particular proceeding must meet the standards set forth in 10 C.F.R. § 2.335(b), something BREDL has not attempted here. For this reason, to the extent the Proposed Contention is meant as a challenge to the adequacy of current NRC safety regulations, it is not subject to adjudication in this proceeding and must be rejected.⁴

III. THE PROPOSED CONTENTION IS NOT SUPPORTED BY THE TASK FORCE REPORT WITH RESPECT TO SEVERE ACCIDENTS

BREDL’s overarching argument, that the Task Force Report demonstrates the inadequacy of current NRC safety regulations and therefore of all related environmental reviews, is not supported by the Task Force Report itself. BREDL asserts that the Proposed Contention is based on a conclusion in the Task Force Report that the level of protection currently provided by NRC regulations is inadequate to ensure protection of public health, safety, and the environment, and that the environmental implications of the report’s recommendations must be considered before any new reactor licensing decision. Proposed Contention at 2-3; see *also* Second Makhijani Declaration ¶¶ 11. The Task Force does not make this conclusion; rather, it states that “continued operation and continued licensing activities do not pose an imminent risk to the public health and safety and are not inimical to the common defense and security.” Task Force Report at 18. The Task Force notes that the level of safety associated with adequate protection of public health and safety has improved over time and

⁴ The NRC Staff notes that a Petition for Rulemaking under 10 C.F.R. § 2.802 has also been submitted in response to the Task Force Report. To the extent any interested person desires a specific change to NRC regulations, this is the correct procedural approach. The Petitioners themselves recognize that some of the issues they raise may be more appropriate for generic resolution by rulemaking, Proposed Contention at 4, and the Petition for Rulemaking provides further indication that the Proposed Contention is intended in part to challenge Commission rules.

should continue to improve “supported by new scientific information, technologies, methods, and operating experience,” but not state that the current level of protection is inadequate. *Id.* Furthermore, the Task Force Report does not take any position on NRC’s environmental reviews. It is well established that a document cited by a petitioner as the supporting basis for a contention is subject to scrutiny, both for what it does and does not say. When a report is the central support for a contention, the contents of that report in its entirety is before the Board and subject to the Board’s scrutiny. *See, e.g., Yankee Atomic Electric Co. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996); rev’d in part on other grounds, CLI-96-7, 43 NRC 235 (1996). See also Southern Nuclear Operating Co. (Early Site Permit for the Vogtle ESP Site), LBP-07-3, 65 NRC 237, 254 (2007)* (“the material provided in support of a contention will be carefully examined by the Board to confirm that on its face it does supply an adequate basis for the contention”). Because this central element of BREDL’s argument is not supported by the document that serves as the grounds for filing the Proposed Contention, BREDL has not provided a sufficient basis for the contention or sufficient information to show that a genuine dispute with the Applicant exists. One of the principal claims made in the Proposed Contention therefore fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii) and (vi).

BREDL appears to believe that the Task Force Report calls for a change to the way accidents are treated in environmental documents. *See Proposed Contention at 13-15.* The Task Force does discuss the distinction between design basis accidents and severe or beyond design basis accidents. *Task Force Report at 17-22.* It suggests creating a new category of events designated as “extended design-basis” and including a number of existing regulatory requirements under this heading. *Id. at 20.*

BREDL appears to have interpreted this section of the Task Force Report as support for a claim either that severe accidents are not currently addressed in NRC environmental reviews, or that the way they are addressed must be changed. *See Proposed Contention at 13-15.* To the extent that BREDL intends the former interpretation, it is incorrect. The Environmental

Standard Review Plan (“ESRP”), which provides guidance for all NRC COL reviews, includes instructions for NRC staff reviewers to consider the environmental impacts of both design-basis accidents and severe accidents. See generally NUREG-1555, *Environmental Standard Review Plan*, Chapter 7 (Oct. 1999). The Lee ER addresses the environmental impacts of design basis accidents, ER at 7.1-1 – 7.1-4, and of severe accidents, ER at 7.2-1 – 7.2-7. A petitioner’s imprecise reading of a reference document does not create a contention suitable for litigation. *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300 (1995). This portion of the contention, like the previous one, therefore fails to demonstrate the existence of a genuine dispute with the Applicant, and is therefore inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

A. The Challenge to the Adequacy of the Lee Severe Accident Review is Unsupported by the Task Force Report and Therefore Untimely

To the extent that BREDL intends instead to question the adequacy of the Lee ER with respect to its analysis of the environmental consequences of accidents, BREDL has not cited any part of the Task Force Report in support of their claims. See Proposed Contention at 12. Rather, this portion of their argument is based on assertions by BREDL’s expert, Dr. Arjun Makhijani, that

a major overarching step that needs to be taken is to integrate into the design basis for NRC safety requirements an expanded list of severe accidents and events, based on current scientific understanding and evaluations. This would ensure that potential mitigation measures are evaluated on the basis of whether they are needed for safety and not whether they are merely desirable. Should the NRC fail to incorporate an expanded list of severe accident requirements in the design basis of reactors, then a conclusion that the design provides for adequate protection to the public against severe accident risks could not be justified.

Second Makhijani Declaration ¶ 7. BREDL rephrases Dr. Makhijani’s assertions as a claim that the Task Force recommends “the incorporation of accidents formerly classified as ‘severe’ or ‘beyond design basis’ into the design basis.” Proposed Contention at 13-14. According to BREDL, this recommendation invalidates the environmental conclusions in the ER. *Id.*

Neither Dr. Makhijani's Declaration nor the Proposed Contention text cites to the Task Force Report in support of this proposition. Indeed, both ignore contrary statements within the Task Force Report itself, including the statement that "[t]he Task Force envisions a framework in which the current design-basis requirements (i.e., for anticipated operational occurrences and postulated accidents) would remain largely unchanged" and the proposal to establish a new "extended design-basis" category for both current beyond design-basis regulatory requirements and any future rules that may be added. Task Force Report at 21. Both also disregard the Task Force's conclusion that "the ESBWR and AP1000 designs have many of the design features and attributes necessary to address the Task Force recommendations" and its recommendation that design certification rulemakings for those designs be completed "without delay." *Id.* at 71-72.

With respect to this portion of the Proposed Contention, BREDL's assertions are untimely in that they are not based on any new information contained in the Task Force Report and could have been filed on a number of occasions prior to that report's publication. Related claims were, in fact, made in Dr. Makhijani's April 2011 declaration accompanying the Emergency Petition currently pending before the Commission. See First Makhijani Declaration ¶¶ 16, 33-35. Any specific challenges to the Applicant's environmental report could have been raised at any time following its docketing. NRC regulations permit the filing of new or amended contentions

only with leave of the presiding officer upon a showing that (i) [t]he information upon which the amended or new contention is based was not previously available; (ii) [t]he information upon which the amended or new contention is based is materially different than information previously available; and (iii) [t]he amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

10 C.F.R. § 2.309(f)(2). BREDL has not cited to any allegedly new information in the Task Force Report that supports its argument regarding "the incorporation of accidents formerly

classified as 'severe' or 'beyond design basis' into the design basis," and this portion is therefore untimely.

BREDL has also failed to show good cause for untimely filing, as required by 10 C.F.R. § 2.309(c)(1)(i). Good cause for late filing is the most important factor to consider when evaluating whether an untimely filing will be accepted, and failure to meet this factor requires a compelling showing regarding the other factors. See *Commonwealth Edison Co.* (Braidwood Nuclear Plant, Units 1 and 2), CLI-86-8, 23 NRC 241, 244 (1986); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-743, 18 NRC 387, 397 (1983). Of the remaining factors in 10 C.F.R. § 2.309(c)(1), (vii) and (viii) also disfavor BREDL, as the issues they raise would broaden the proceeding, result in delays, and not contribute to a sound record. The other factors favor BREDL or are neutral. However, given the importance of 10 C.F.R. § 2.309(c)(1)(i), (vii), and (viii), this untimely portion of the Proposed Contention should not be entertained.

This portion of the Proposed Contention also fails to supply an adequate basis or demonstrate the existence of a genuine dispute with the Applicant on a material issue of law or fact. In part, this failure may be related to BREDL's assumption, evident throughout its pleading, that only design-basis accidents and not severe accidents are associated with mandatory safety regulations. See Proposed Contention at 2, 6, 7, 8, 9, 13, 14; see also *infra* n. 5. The Task Force Report itself notes the potential for confusion associated with this issue, and observes that

the phrase "beyond design basis" is vague, sometimes misused, and often misunderstood. Several elements of the phrase contribute to these misunderstandings. *First, some beyond-design-basis considerations have been incorporated into the requirements and therefore directly affect reactor designs.* The phrase is therefore inconsistent with the normal meaning of the words. In addition, there are many other beyond-design-basis considerations that are not requirements. The phrase therefore fails to convey the importance of the requirements to which it refers.

Task Force Report at 19 (emphasis added). The Task Force Report makes recommendations regarding the a new regulatory framework for mandatory requirements related to beyond design-basis considerations, including a terminology change intended to clarify the nature of these requirements, but does not propose changes to current design-basis requirements. *Id.* at 20-21. As noted above, a petitioner's imprecise reading of a reference document does not create a contention suitable for litigation. *Georgia Tech*, LBP-95-6, 41 NRC at 300. BREDL's arguments related to this issue therefore fail to provide an adequate basis for an admissible contention, in violation of 10 C.F.R. § 2.309(f)(1)(ii), or to demonstrate the existence of a material dispute as required by 10 C.F.R. § 2.309(f)(1)(vi).

B. The Discussion of SAMAs is Not Supported by the Task Force Report

The Proposed Contention also includes an argument related to SAMAs, which are considered in NRC environmental reviews. *See, e.g.*, ER at 7.3-1. According to BREDL, the Task Force Report includes a recommendation that all SAMAs be incorporated into the set of features required in all nuclear power plants "*without regard to their cost* as fundamentally required for all NRC standards that set requirements for adequate protection of health and safety." Proposed Contention at 14 (emphasis in original). Neither the Task Force Report nor the declaration submitted in support of the Proposed Contention contains any statement to that effect; further, as noted in Section II above, the Task Force Report makes no reference to SAMAs or any other portion of NRC's environmental reviews. Because neither the Task Force Report nor the declaration submitted with the contention contains such a statement, this portion of the Proposed Contention fails to satisfy the requirements of both 10 C.F.R. § 2.309(f)(1)(v), which requires factual or expert support for a contention.

The recommendations in the Task Force Report, were they to be adopted, would have no impact on the nature of SAMA analysis. SAMA analyses, which are related to the probabilistic risk assessment (PRA) requirement of 10 C.F.R. § 50.34(f)(1)(i) and include cost-benefit analysis by definition, are intended "to review and evaluate plant-design alternatives that

could significantly reduce the radiological risk from a severe accident.” See ESRP at 7.3-1 to 7.3-5. As the Commission has stated, SAMAs are safety enhancements intended to reduce the risk of severe accidents. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 290-91 (2010). A SAMA analysis examines the extent to which implementation of the SAMA would decrease the probability-weighted consequences of the analyzed severe accident sequences. *Id.* at 291. “Significantly, NRC SAMA analyses are not a substitute for, and do not represent, the NRC NEPA analysis of potential impacts of severe accidents.” *Id.* at 316. Rather, SAMA analyses are rooted in a cost-beneficial assessment:

SAMA analysis is used for determining whether particular SAMAs would sufficiently reduce risk – e.g., by reducing frequency of core damage or frequency of containment failure – for the SAMA to be cost-effective to implement. The SAMA analysis therefore is a [PRA] analysis. If the cost of implementing a particular SAMA is greater than its estimated benefit, the SAMA is not considered cost-beneficial to implement.

Id. at 291. For a SAMA analysis, the “goal is *only* to determine what safety enhancements are cost-effective to implement.” *Id.* at 317 (emphasis added). A SAMA analysis, including cost-benefit considerations, is specifically required by NRC regulations governing the environmental review of standard design certification applications. See 10 C.F.R. § 51.55(a). Design features required by safety regulations are not subject to SAMA analysis in the environmental review, even if they are related to severe accidents, because the SAMA analysis only considers mitigation *alternatives*, that is, features that are not already incorporated into the design.

In making their argument, BREDL appears to merge concepts related to mandatory safety regulations under 10 C.F.R. Parts 50 and 52 with the SAMA analysis process. As noted above, BREDL incorrectly alleges that 10 C.F.R. §§ 52.47(a)(23) and 52.79(a)(38) are subject to cost-benefit analysis, a proposition they support with citations to discussions related to the SAMA analysis for the AP1000 design certification rule and not with any references to NRC

safety regulations or the Task Force Report. Proposed Contention at 8. Furthermore, BREDL asserts that “the Task Force effectively recommends a complete overhaul of the NRC’s system for mitigating severe accidents through consideration of SAMAs. *Id.* at 14. According to BREDL, the NRC’s current strategy related to severe accidents is limited to the SAMA analysis prepared as part of the environmental review and any voluntary measures adopted at a specific facility. *Id.*

In so arguing, BREDL ignores those regulations mentioned in the Task Force Report that do impose mandatory safety requirements related to severe accidents, and which the Task Force identifies as elements to be incorporated into their proposed “extended design-basis” regulatory framework. Task Force Report at 20-21. These include the station blackout rule in 10 C.F.R. § 50.63, the rules governing anticipated transient without scram in 10 C.F.R. § 50.62, the maintenance rule in 10 C.F.R. § 50.65, the aircraft impact rule in 10 C.F.R. § 50.150, the rule for protection against beyond design-basis fires and explosions in 10 C.F.R. § 50.54(hh), and others. *Id.* at 20. Furthermore, BREDL ignores the Task Force’s observation that 10 C.F.R. §§ 52.47(a)(23), which applies to design certifications, and 52.79(a)(38), which applies to COLs, have “clearly established . . . severe accident defense-in-depth requirements for new reactors, . . . thus bringing unity and completeness to the defense-in-depth concept.” *Id.* By disregarding these regulatory requirements and focusing on the cost-benefit analysis conducted as part of the SAMA review in the ER, BREDL misunderstands the NRC’s current approach to severe accidents, as well as of the Task Force’s recommendations.

To the extent BREDL is using the term “SAMA” as shorthand for a new design feature it wishes to see implemented at nuclear facilities, the correct procedural option is to file a Petition for Rulemaking under 10 C.F.R. § 2.802 rather than contentions in individual proceedings. BREDL concedes that some of the issues they raise may be resolved more appropriately by rulemaking than in site-specific proceedings. Proposed Contention at 4. BREDL has not identified any such feature or features here.

The possibility that BREDL is using the term ‘SAMA’ outside its usual NEPA context may be responsible for the assertion that certain mandatory safety regulations are “subject to cost-benefit analysis.” See Proposed Contention at 8. As stated above, SAMA analyses conducted pursuant to NEPA use cost-benefit analyses to evaluate potential design alternatives for use at specific facilities. As discussed in Section II.A, safety regulations in 10 C.F.R. Parts 50 and 52 do not, regardless of whether they apply to design-basis or severe accident phenomena.⁵ Whatever BREDL’s intent in using the “SAMA” terminology, however, nothing in this portion of their argument amounts to a contention meeting the requirements of 10 C.F.R. § 2.309(f)(1).

C. Assertions Related to the Alternatives Analysis in the ER are Also Unsupported by the Task Force Report and Do Not Include an Admissible Contention

BREDL’s final NEPA-related claim is that making SAMAs mandatory would affect the outcome of NRC’s environmental reviews in two ways. First, BREDL argues that making SAMAs mandatory would improve plant safety. Proposed Contention at 15. Second, BREDL asserts that imposing new mandatory safety features would raise the cost of new reactors and could affect the alternatives analysis in the ER. *Id.*; see also Second Makhijani Declaration ¶¶ 13-24. According to BREDL, “these costs may be significant, showing that other alternatives

⁵ It appears that BREDL has drawn incorrect inferences from *Union of Concerned Scientists v. NRC*, which they cite in their pleading. Proposed Contention at 9, citing 824 F.2d 108, 120 (D.C. Cir., 1987). As stated in this case, the AEA

prohibits the Commission from considering costs in setting the level of adequate protection and requires the Commission to impose backfits, regardless of cost, on any plant that fails to meet this level. The Act allows the Commission to consider costs only in deciding whether to establish or whether to enforce through backfitting safety requirements that are not necessary to provide adequate protection.

824 F.2d at 119-20. This distinction, which relates to NRC decisions about making new regulations and applying them to existing licensees by imposing a backfit, does not open the door to the use of cost-benefit analysis by license applicants with respect to safety features required by current mandatory safety rules. The distinction between design-basis and beyond design-basis phenomena, which BREDL considers central to its argument, therefore has no connection to the question of whether a given safety feature is mandatory or not.

such as the no-action alternative and other alternative electricity production sources may be more attractive.” Proposed Contention at 15.

The first of these claims does nothing to invalidate the analysis in the Lee ER. If additional safety measures were to be imposed on reactors for any reason, the result would likely be to lower accident risks and therefore reduce accident impacts below those stated in the ER. Any environmental analysis carried out under the current regulations would therefore be conservative.

The second claim states what appears to be the essence of the BREDL’s NEPA contention, namely that the alternative analysis in the Lee ER is inadequate. If this is intended as the core of the Proposed Contention, then the Proposed Contention as a whole is untimely for the reasons discussed in Section III.A above. As in that section, the argument that increased costs for nuclear facilities will alter the alternatives analysis in environmental reviews for new reactors has been submitted previously in connection with the Emergency Petition currently pending before the Commission. See First Makhijani Declaration ¶¶ 35. Additionally, contentions challenging the alternatives analysis in the Lee COL application could have been filed at any time since the application became available. This portion of the Proposed Contention should therefore be rejected for timeliness reasons alone.

In addition to the timeliness issue, the Proposed Contention also fails to meet the pleading requirements of 10 C.F.R. § 2.309(f)(1). The text of the Proposed Contention does not mention the specific recommendations in the Task Force Report or raise a challenge to any portion of the Lee COL application. The accompanying declaration does list a number of specific items that, according to Dr. Makhijani, are likely to substantially increase the cost of nuclear reactors in general. Second Makhijani Declaration ¶¶ 13-24. Many of these are clearly inapplicable to the Lee proceeding in that they recommend specific upgrades to the existing reactor fleet rather than any changes related to new reactors. See *id.* ¶¶ 15, 19, 21, 22, & 23. Others, such as a recommendation to review design certifications with respect to station

blackout and spent fuel pool issues, are not drawn from the Task Force Report directly, but rather represent Dr. Makhijani's inferences. *See id.* ¶ 20. Even with respect to the others, however, Dr. Makhijani makes no attempt to relate his assertions to the Lee alternatives analysis, and merely asserts that significantly increased costs are likely. BREDL makes no attempt to focus the claims made in Dr. Makhijani's declaration, which is extremely broad and has been filed in multiple proceedings, to anything specific to the Lee COL application. For these reasons, this portion of the Proposed Contention fails to meet the basis requirement of 10 C.F.R. § 2.309(f)(1)(ii), or the requirements in 10 C.F.R. § 2.309(f)(1)(v)-(vi) that petitioners provided supporting information to shows a genuine dispute with the applicant.

In addition, BREDL's assertions regarding the proposed reactors' costs fail to meet the materiality requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi) because reactor costs are not material to the Lee environmental review. In the *Summer* COL proceeding, the Commission held that contentions related to reactor costs "were potentially relevant only if an environmentally preferable alternative had been identified." *See South Carolina Electric & Gas Co. & South Carolina Public Service Authority (Also Referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-21, 72 NRC __, __ (Aug. 27, 2010) (slip op. at 4). The Commission provided the basis for this holding in a previous decision in the same proceeding:

[N]either NEPA nor any other statute gives us the authority to reject an applicant's proposal solely because an alternative might prove less costly financially. Monetary considerations come into play in only the opposite fashion — i.e., if an alternative to the applicant's proposal is environmentally preferable, then we must determine whether the environmental benefits conferred by that alternative are worthwhile enough to outweigh any additional cost needed to achieve them.

South Carolina Electric & Gas Co. & South Carolina Public Service Authority (Also Referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 23-24 (2010) (quoting *Consumers Power Co. (Midland Plant, Units 1 and 2)*, ALAB-458, 7 NRC 155, 162 (1978)). In *Summer*, the possibility of an environmentally preferable alternative remained only if the petitioners' alternatives contention was admissible, and the Commission therefore

stated that should the licensing board reject this alternatives contention, then it must also reject the petitioners' cost-related contentions. *Sumner*, CLI-10-21, 72 NRC at ___ (slip op. at 4). In the instant proceeding, the ER analyzes alternatives and concludes that none of them are environmentally preferable or obviously superior. See ER at Section 9.3.2 and Table 9.3-3. In addition, there are no pending or admitted alternatives contentions in this proceeding.

Therefore, BREDL's assertions regarding reactors costs are not material to this proceeding and do not form an admissible basis for the Proposed Contention. See 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

IV. BREDL's Further Assertions Related to Environmental Implications of the Task Force Report are Unsupported and Inadmissible

BREDL asserts that the Lee ER must be supplemented to include a discussion of the Task Force Report's recommendations related to seismic and flooding events. Proposed Contention at 16-17. This assertion is based on statements made in the declaration of Dr. Ross McCluney, who discusses the general nature of seismic seiches and earthquake predictions based on references to previously available information and suggests that the task force's recommendations related to seismic and flooding issues be implemented immediately. See McCluney Declaration ¶¶ 6-15. This portion of the Proposed Contention is untimely because BREDL's assertions are based on the Task Force Report and the McCluney Declaration, but BREDL fails to explain why either of these documents contain any new information material to seismic or flooding considerations at the Lee site. See 10 CFR § 2.309(f)(2).

BREDL's assertion that the Task Force Report requires supplementation of environmental documents in the Lee proceeding to address recommendations related to seismic and flooding events also does not accurately reflect the report's contents. BREDL cites portions of the Task Force Report that recommend existing licensees reevaluate seismic and flooding hazards at their sites and make any necessary changes to structures, systems, and components that are important to safety. Proposed Contention at 17, citing Task Force Report at 30. BREDL

concludes that, as a consequence of this recommendation, the ER in the Lee proceedings is incomplete and requires supplementation. *Id.* However, the Task Force Report states clearly that all current design certification and COL applicants address seismic and flooding issues adequately under existing regulations and guidance. Task Force Report at 71. As noted in Section III above, a referenced document may be scrutinized both for what it does and what it does not say. *Yankee Atomic*, LBP-96-2, 43 NRC at 90. Thus, this portion of the contention is not supported by fact or expert opinion and fails to demonstrate the existence of a genuine dispute, in contravention of the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

Finally, the assertion that all twelve of the task force's recommendations must be addressed in environmental documents prior to COL issuance is not supported by the report itself. As stated previously, the Task Force Report makes no mention of environmental reviews. It also recommends specific strategies for addressing its recommendations in the safety reviews of design certification and COL applications. Task Force Report at 71-72. BREDL does not address this portion of the report, which specifically states that not all recommendations related to the existing reactor fleet apply to new reactors. This portion of the Proposed Contention, like the previous one, therefore fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

CONCLUSION

BREDL does not discuss or satisfy the standards to reopen this closed proceeding as required by 10 C.F.R. § 2.326. Further, BREDL does not satisfy the threshold contention admissibility standards or the requirements for new or nontimely contentions. As discussed above, each of these reasons provides an independent basis to dismiss the Proposed Contention. Thus, the Proposed Contention should be dismissed.

Respectfully Submitted,

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Executed in Rockville, MD
this 6th Day of September 2011.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL

In the Matter of)	
)	
DUKE ENERGY CAROLINAS, LLC,)	
)	Docket Nos. 52-018 and 52-019
(William States Lee III Nuclear Station)	
Units 1 and 2))	

CERTIFICATE OF SERVICE

I hereby certify that copies of NRC STAFF ANSWER TO INTERVENORS' MOTION TO ADMIT NEW CONTENTION REGARDING THE SAFETY AND ENVIRONMENTAL IMPLICATIONS OF THE NRC TASK FORCE REPORT ON THE FUKUSHIMA DAI-ICHI ACCIDENT has been served upon the following persons by Electronic Information Exchange this 6th day of September, 2011:

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