

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
CALVERT CLIFFS 3 NUCLEAR PROJECT,)
LLC, and UNISTAR NUCLEAR OPERATING) Docket No. 52-016-COL
SERVICES, LLC)
)
(Calvert Cliffs Nuclear Power Plant, Unit 3))

NRC STAFF ANSWER TO JOINT 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

The United States Nuclear Regulatory Commission staff ("Staff") hereby files its response to the Joint Intervenors' "Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report" (Contention 11) (August 11, 2011). For the reasons set forth herein, Joint Intervenors' proposed New Contention 11 should not be admitted.

PROCEDURAL BACKGROUND

On July 13, 2007, Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC (collectively, Applicants) first submitted part of their application for a combined license (COL) for one U.S. Evolutionary Power Reactor (U.S. EPR) to be located adjacent to the existing Calvert Cliffs Nuclear Power Plant (CCNPP), Units 1 and 2, near Lusby, Calvert County, Maryland (COLA or Application). UniStar Nuclear LLC; Notice of Receipt and Availability of Part of an Application for a Combined License, 72 Fed. Reg. 45,832 (Aug. 15,

2007).¹ The proposed unit will be known as Calvert Cliffs Nuclear Power Plant, Unit 3 (Calvert Cliffs 3). *Id.*

On September 26, 2008, the NRC issued a notice of hearing and opportunity to intervene. Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC Notice of Hearing and Opportunity To Petition for Leave To Intervene and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation on a Combined License for the Calvert Cliffs Nuclear Power Plant 3, 73 Fed. Reg. 55,876 (Sept. 26, 2008). The Intervenors timely filed a petition to intervene which alleged seven contentions. Petition to Intervene in Docket No. 52-016, Calvert Cliffs-3 Nuclear Power Plant Combined Construction and License Application, at 5 (Nov. 19, 2008) (Petition). On March 24, 2009, the Atomic Safety and Licensing Board admitted the Intervenors as parties to this proceeding and admitted three contentions. *Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs Unit 3), LBP-09-04, 69 NRC 170, 190-196, *aff'd in relevant part*, CLI-09-20, 70 NRC 911, 918-21 (2009). Currently, there are two admitted contentions, Contention 1 and Contention 10C.

On April 14, 2011, Joint Intervenors 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. On April 21, 2011, the Joint Intervenors filed "Additional Notes on Amendment and Errata to [the Emergency Petition], as Related to Above-Captioned Proceeding." Also on Apr. 21, 2011, the Joint Intervenors filed an additional "Amendment and Errata to [the Emergency Petition]." The Staff and Applicant filed answers to the Emergency

¹ The original COL applicants were Constellation Generation Group, LLC and UniStar Nuclear Operating Services, LLC. The application was revised by letter dated August 1, 2008, which among other things, changed the applicants to Calvert Cliffs 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC.

Petition on May 2, 2011. The Commission has not yet issued a ruling on the Emergency Petition

On April 18, 2011, the Board issued a Show Cause Order related to the resolution of Contention 1. Order (To show cause why the Board should not grant summary disposition as to Contention 1, deny authorization to issue the license, and terminate this proceeding), (Apr. 18, 2011) (unpublished) (Show Cause Order). On July 7, 2011, the Board held an oral argument to discuss: (1) the parties responses to the Show Cause Order; and (2) whether an evidentiary hearing should proceed on Contention 10C if the Board grants summary disposition as to Contention 1.

On May 18, 2011, Staff provided notice to Board and the parties of the issuance and availability of NUREG-1936, *Environmental Impact Statement for Combined Licenses (COLs) for Calvert Cliffs Nuclear Power Plant, Unit 3; Final Report* (May 2011) (ADAMS Accession Nos. ML11129A167 and ML11129A179) (FEIS). The FEIS was published May 20, 2011.

On June 20, 2011, Applicants filed a Motion for Summary Disposition of Contention 10C. See Applicants' Motion for Summary Disposition of Contention 10C (June 20, 2011). On the same date, June 20, 2011, Joint Intervenors filed a Submission of Amended Contention 10C. See Joint Intervenors' Submission of Amended Contention 10C (June 20, 2011). On Aug. 11, 2011, the Joint Intervenors filed a "Motion to Admit New Contention Regarding the Safety and Environmental Implications of the [NRC] Task Force Report on the Fukushima Dai-ichi Accident." Along with their motion, the Joint Intervenors filed a "Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the Fukushima Task Force Report" (Contention 11). Additionally, the Joint Intervenors filed a "Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision."

On August 26, 2011, the Board issued a Memorandum and Order, Denying Summary Judgment of Contention 10C, Denying Amended Contention 10C, and Deferring Ruling on

Contention 1. Order (Denying Summary Judgment of Contention 10C, Denying Amended Contention 10C, and Deferring Ruling on Contention 1) (Aug. 26, 2011) (unpublished).

LEGAL STANDARDS

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 legal or factual issue sought to be raised;
- (ii) provide a brief explanation of the basis for the contention;
- (iii) demonstrate that the issue raised is within the scope of the proceeding;
- (iv) demonstrate that the issue raised 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, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing;
- (vi) provide sufficient information to show that a genuine dispute with the Applicant exists with regard to a material issue of law or fact, including references to specific portions of the application that the

petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief

10 C.F.R. § 2.309(f)(1). 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).² 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),

² 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 no showing of good cause for the lateness is tendered, “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)).

DISCUSSION

According to the Joint Intervenors, 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. Proposed Contention at 2; see *also* Second Makhijani Declaration ¶ 11. From this starting point, the Joint Intervenors argue 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 10. The Joint Intervenors therefore claim that any conclusions in environmental documents associated with the Calvert Cliffs 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 13; see *also* Second Makhijani Declaration ¶ 11.

The Joint Intervenors also make 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, the Joint Intervenors claim 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 12-15. Second, the Joint Intervenors assert that the Task Force Report requires supplementation of environmental documents in the Calvert Cliffs proceeding to address recommendations related to seismic and flooding events. *Id.* at 15-16. Finally, the Petitioners

argue that all twelve recommendations in the Task Force Report be considered in the Calvert Cliffs environmental review before licensing decisions are made. *Id.* at 16-18.

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. In addition, because the Calvert Cliffs Final EIS has been issued, a supplement to the EIS is not necessary unless the standards in 10 C.F.R. § 51.92(a) are satisfied. As the Commission has held, supplementation is not required unless the new information “present[s] a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.” *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, NM 87313), CLI-06-29, 64 NRC 417, 419 (2006) (internal quotation marks omitted). The Joint Intervenors come nowhere close to showing a genuine dispute over whether this high threshold has been met. For these reasons and others discussed below, the Proposed Contention fails to satisfy the contention pleading rules in 10 C.F.R. §§ 2.309 and 2.335 and should be rejected.

I. 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 Contentions at 1. According to the Joint Intervenors, “[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. The Joint Intervenors also challenge 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). Joint Intervenors 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 the Joint Intervenors have 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 adjudicable in this proceeding and must be rejected.³

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

The Joint Intervenors’ 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. The Joint Intervenors assert 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; 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

³ 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 Intervenors 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 does 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 an intervenor as the supporting basis for a contention is subject to scrutiny, both what it does and doesn’t 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; *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 the Joint Intervenors’ argument is not supported by the document that serves as the grounds for filing the Proposed Contention, the Joint Intervenors have not provided a sufficient basis for the contention or sufficient information to show that a genuine dispute with the Applicant exists. One of the most important claims made in the Proposed Contention therefore fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii), (vi).

The Joint Intervenors appear to believe that the Task Force Report calls for a change to the way accidents are treated in environmental documents. *See Proposed Contention at 12-14.* 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.

The Joint Intervenors appear 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 12-13. To the extent that the Joint Intervenors intend the former interpretation, they are simply 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 Calvert Cliffs FEIS addresses the environmental impacts of design basis accidents at pages 5-75 to 5-79 and of severe accidents at 5-79 to 5-88. 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 Calvert Cliffs Severe Accident Review is Unsupported by the Task Force Report and Therefore Untimely

To the extent that the Joint Intervenors intend instead to question the adequacy of the Calvert Cliffs FEIS with respect to its analysis of the environmental consequences of accidents, the Joint Intervenors have 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 the Joint Intervenors’ 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. The Joint Intervenors rephrase 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 Contentions at 12.

According to the Joint Intervenors, this recommendation invalidates the environmental conclusions in the Calvert Cliffs FEIS. *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.

With respect to this portion of the Proposed Contention, the Joint Intervenors' 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 or the FEIS could have been raised at any time following publication of those documents. 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). The Joint Intervenors have not cited to any allegedly new information in the Task Force Report that supports their argument regarding "the incorporation of accidents

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

The Joint Intervenors have 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 disfavors the Joint Intervenors, as the issues they raise would broaden the proceeding, result in delays, and not contribute to a sound record. The other factors favor the Joint Intervenors 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.

Like those before it, the 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 the Joint Intervenors' assumption, evident throughout their 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, 12, 13; see also *infra* at n.2. 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. The Joint Intervenors' 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 FEIS at 5-79 to 5-90. According to the Joint Intervenors, 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 13 (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 cost-benefit analysis in the environmental review, even if they are related to severe accidents.

In making their argument, the Joint Intervenors appear 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, The Joint Intervenors incorrectly allege 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, the Joint Intervenors assert that “the Task Force effectively recommends a

complete overhaul of the NRC's system for mitigating severe accidents through consideration of SAMAs. *Id.* at 12. According to the Joint Intervenors, 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, the Joint Intervenors ignore 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, the Joint Intervenors ignore 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 . . . 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 EIS, the Joint Intervenors misunderstand the NRC's current approach to severe accidents, as well as of the Task Force's recommendations.

To the extent Joint Intervenors are using the term "SAMA" as shorthand for new design features they wish 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. The Joint Intervenors themselves concede that some of the issues they raise may be resolved more appropriately by rulemaking than in site-specific proceedings. Proposed Contention at 4. The Joint Intervenors have not identified any such feature or features here.

The possibility that the Joint Intervenors are 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.⁴ Whatever the Joint Intervenors’ 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 EIS are Also Unsupported by the Task Force Report and Do Not Include an Admissible Contention

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

⁴ It appears that the Intervenors have 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 the Intervenors consider central to their argument, therefore has no connection to the question of whether a given safety feature is mandatory or not.

significant, showing that other alternatives such as the no-action alternative and other alternative electricity production sources may be more attractive.” Proposed Contention at 13.

The first of these claims does nothing to invalidate the analysis in the Calvert Cliffs FEIS. 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 FEIS. 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 Joint Intervenors’ NEPA contention, namely that the alternative analysis in the Calvert Cliffs EIS 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 II.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. 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 Calvert Cliffs 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 Calvert Cliffs 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 Calvert Cliffs FEIS alternatives analysis, and merely asserts that significantly increased costs are likely. The Joint Intervenors in this proceeding 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 Calvert Cliffs 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.

III. The Petitioners' Further Assertions Related to Environmental Implications of the Task Force Report are Unsupported and Inadmissible

The Joint Intervenors' further assertion that the Task Force Report requires supplementation of environmental documents in the Calvert Cliffs proceeding to address recommendations related to seismic and flooding events also does not accurately reflect the report's contents. The Joint Intervenors cite 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 14-15 (citing Task Force Report at 30). The Joint Intervenors conclude that, as a consequence of this recommendation, the environmental documents in the Calvert Cliffs proceedings are incomplete and require 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 II 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. The Joint Intervenors do 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), (vi).

CONCLUSION

For the reasons set forth herein, Joint Intervenors Motion, proposed new Contention 11 should be denied.

Respectfully submitted,

/Signed (electronically) by/

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Rockville, Maryland
September 6, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
CALVERT CLIFFS 3 NUCLEAR PROJECT, LLC,)
AND UNISTAR NUCLEAR OPERATING) Docket No. 52-016-COL
SERVICES, LLC)
)
(Calvert Cliffs Nuclear Power Plant, Unit 3))

CERTIFICATE OF SERVICE

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

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Dated at Rockville, Maryland
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