UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
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ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket Nos. 50-247-LR/286-LR
	)	
(Indian Point Nuclear Generating Units 2 and 3)	)	

NRC STAFF'S ANSWER IN OPPOSITION TO 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

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TABLE OF CONTENTS

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the Staff of the U.S. Nuclear Regulatory Commission ("Staff") hereby files its answer to the "Contention in Support of 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," jointly filed by Riverkeeper, Inc. and Hudson River Sloop Clearwater, Inc. (collectively "Intervenors")[1] on August 11, 2011, regarding the Entergy Nuclear Operations, Inc. ("Entergy") license renewal application for Indian Point Nuclear Generating Units 2 and 3 ("Indian Point").

Intervenors' contention is inadmissible because (1) the issues raised are outside the scope of this license renewal proceeding, (2) the issues raised are immaterial to this

[1] *See* Riverkeeper, Inc. ("Riverkeeper") and Hudson River Sloop Clearwater, Inc. ("Clearwater") New Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the NRC Fukushima Task Force Report ("Petition") (August 11, 2011) (Agencywide Documents Access and Management System ("ADAMS") Accession No. ML11229A712). *See also* Motion to Admit Riverkeeper, Inc. and Hudson River Sloop Clearwater, Inc. New Contention Regarding the NEPA Requirement to Address Safety And Environmental Implications of the NRC Fukushima Task Force Report ("Motion to Admit New Contention") (Aug. 11, 2011) (ADAMS Accession No. ML11229A712); and Riverkeeper, Inc. and Hudson River Sloop Clearwater, Inc. Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision ("Petition for Rulemaking") (Aug 11, 2011) (ADAMS No. ML11229A712).

proceeding, (3) the proffered basis is inadequate to support the contention, and (4) the contention is untimely.

BACKGROUND

This proceeding concerns the license renewal application ("LRA") for Indian Point Units 2 and 3 ("IP2 and IP3" or "Indian Point"), which Entergy submitted on April 23, 2007. The NRC published a notice of acceptance for docketing and notice of opportunity for hearing on the LRA, on August 1, 2007.[2] Petitions for leave to intervene were then timely filed by various intervenors, including Riverkeeper and Clearwater.[3] On July 31, 2008, the Board granted Riverkeeper's and Clearwater's separate petitions to intervene and admitted numerous contentions.[4] The Indian Point Final Supplemental Environmental Impact Statement ("FSEIS") was published in December 2010.[5] On March 11, 2011, Japan experienced an earthquake followed by a tsunami, which damaged some of the reactor structures, systems and components located at the Fukushima Dai-ichi site. On April 14, 2011, multiple intervenors in numerous license renewal proceedings, COL proceedings, and rulemakings asked the Commission to stay all reactor licensing decisions, pending consideration of the Fukushima events.[6] On July 12, 2011, a special task force comprised of NRC Staff members and

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[2] "Entergy Nuclear Operations, Inc., Indian Point Nuclear Generating Unit Nos. 2 and 3; Notice of Acceptance for Docketing of the Application and Notice of Opportunity for Hearing Regarding Renewal of Facility Operating License Nos. DPR-26 and DPR-64 for an Additional 20-Year Period," 72 Fed. Reg. 42,134 (Aug. 1, 2007).

[3] *See, e.g.,* "Riverkeeper, Inc.'s Request for Hearing and Petition to Intervene in the License Renewal Proceeding for the Indian Point Nuclear Power Plant" (Nov. 30, 2007).

[4] Because the Staff's answer to the Petition to Intervene extensively discussed the contention admissibility standards, the Staff will not repeat them here.

[5] NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38 Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 (December 2010).

[6] Emergency Petition To Suspend All Pending Reactor Licensing Decisions And Related Rulemaking Decisions Pending Investigation Of Lessons Learned From Fukushima Dai-ichi Nuclear Power Station Accident ("Emergency Petition") (April 14, 2011) (ADAMS Accession No. ML11117A146). The Emergency Petition was filed over multiple days by various parties involved in the disparate license renewal and COL proceedings and remains pending before the Commission.

managers issued its near-term report assessing the Fukushima events and identifying potential regulatory actions for consideration ("Task Force Report" or "TFR").[7] On August 11, 2011, Intervenors Riverkeeper and Clearwater filed the present contention in the Indian Point license renewal proceeding.[8] The Intervenors' Contention states:

> The FSEIS for Indian Point license renewal fails to satisfy the requirements of NEPA because it does not address the new and significant environmental implications of the findings and recommendations raised by the NRC's Fukushima Task Force Report. As required by NEPA and the NRC regulations, these implications must be addressed in either a revised FSEIS, or a Supplement to the FSEIS.[9]

DISCUSSION

I. Intervenors' Contention Raises Issues Beyond the Scope of This Proceeding

The Intervenors have not demonstrated that the issues raised by their Contention are within the scope of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii). Instead, the Intervenors proffer, in a single sentence, a generalized claim that the Contention is within scope because it requests compliance with the National Environmental Policy Act ("NEPA") and NRC regulations implementing NEPA. Petition at 17. As explained in detail below, the contention raises issues that are outside the scope of this proceeding and thus must be rejected. *Dominion Nuclear Connecticut, Inc. (*Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 567 (2005). Specifically, the Contention (1) seeks to litigate in an individual proceeding the TFR's recommendations, which are being addressed by the Commission generically; (2) impermissibly challenges the generic determinations in Table B-1 of Appendix B to Part 51 that the environmental consequences of design basis and severe (i.e., beyond design

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[7] "Recommendations for Enhancing Reactor Safety in the 21st Century; The Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident" (July 12, 2011).

[8] Similar contentions have been filed in other proceedings involving both COL and license renewal proceedings.

[9] Petition at 4.

basis) accidents are small, without requesting a waiver of those regulations in this proceeding; (3) challenges the Commission's regulations in 10 C.F.R. §§ 51.45 and 51.53(c); (4) raises emergency planning issues, which are outside the scope of license renewal; and (5) is a generalized attack on the Commission's safety regulations. Consequently, the Contention is inadmissible.

A. The Contention is Beyond the Scope of this Proceeding Because It Raises Issues that will be Addressed by the Commission Generically

The Intervenors assert that their Contention is based upon the TFR's findings and recommendations and concede that their contention would be moot if the Commission adopted all of the TFR's recommendations. Petition at 5, 17 – 18. The Intervenors do not, however, assert that these recommendations must be resolved in individual proceedings and, in fact, the Intervenors acknowledge that generic resolution may be more appropriate. *See* Petition at 4.

By their terms, however, the TFR's recommendations are intended to apply to all existing plants, regardless of their license renewal status. TFR at ix. Only recommendation 5 is limited to plants with specific containment types – BWR Mark I and Mark II containments.[10] *Id.* The TFR also outlines a suggested approach to implement its recommendations. TFR at Appendix A. The TFR envisions that many of its recommendations will ultimately be considered and may be implemented via the rulemaking process using orders, as appropriate, to implement new requirements while the rulemaking process is ongoing. *Compare* TFR Appendix A at 73 "Recommended Rulemaking Activities" *with* TFR Appendix A at 74-75 "Recommended Orders." Currently the TFR's recommendations are being considered by the Commission for application to all operating plants. *See* Staff Requirements Memorandum/ SECY-11-0093, Near-Term

[10] Indian Point Units 2 and 3 are pressurized water reactor with a dry, ambient pressure containment. Therefore recommendations related to Mark I and Mark II containments are inapplicable to either unit at Indian Point.

Report and Recommendations for Agency Actions Following the Events in Japan, Aug. 18, 2011 (ADAMS Accession no. ML112310021).

In accordance with long-standing NRC policy, licensing boards are not to entertain contentions on topics that are or are likely to become the subject of general rulemaking. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), CLI-10-19, 72 NRC__ (July 8, 2010) (slip op. at 2-3). Further, if a party is not satisfied with the Commission's generic resolution of an issue, the remedy lies in the rulemaking process, not in an individual adjudicatory proceeding. *Id.* at 3. Because the TFR recommendations are generic in nature and, if adopted by the Commission will likely become the topic of orders and general rulemaking, the Contention may not be litigated within the scope of any individual proceeding.

B. The Contention is Beyond the Scope of the Proceeding Because it Challenges the Commission's Generic Determinations in Table B-1 on the Environmental Impacts of Design Basis and Severe Accidents

Intervenors' Contention is an explicit, direct attack on the Commissions' generic determinations in 10 C.F.R Part 51 Appendix A, Table B-1 ("Table B-1"), that the environmental impacts of design basis accidents and the probability-weighted consequences of severe accidents are small. Specifically, the Intervenors assert that the TFR "calls into question whether [the conclusions in Table B-1] represent a full, accurate description and examination of all the design basis accidents having the potential for releases to the environment." Petition at 12. The petition for rulemaking accompanying the petition provides further indication that the Contention is intended to challenge the Commission's generic determinations in Table B-1. The petition for rulemaking specifically requests that the Commission "rescind regulations in 10 C.F.R. Part 51 that make generic conclusions about the environmental impacts of severe

reactor accidents and spent fuel pool accidents and that preclude consideration of those issues in individual licensing proceedings." Rulemaking Petition at 1.[11]

The Commission has limited contentions raising environmental issues in license renewal proceedings to those issues that are affected by license renewal and have not been addressed by rulemaking or on a generic basis. *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11, 16 (2001). While "severe accident mitigation alternatives" (SAMA) is a Category 2 issue, i.e., requires site-specific review, the Commission has made a generic determination that environmental impacts for both design basis and severe (i.e., beyond design basis) accidents are small for all plants. *See* 10 C.F.R. Part 51 Appendix A, Table B-1 (Jan. 1, 2011), at 65. With respect to spent fuel pools, the Commission has generically determined that the environmental impacts of spent fuel storage are small. *Id.* at 67. Furthermore the Commission has specifically stated, "[B]ecause onsite storage of spent fuel during the license renewal term is a Category 1 issue, and as such explicitly has been found not to warrant any additional site-specific analysis of mitigation measures, the required SAMA analysis for license renewal is intended to focus on reactor accidents." *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Station), CLI-10-14, 71 NRC __ (Jun. 17, 2010) (slip op. at 32). The Commission further explained, "a SAMA that addresses [spent fuel pool] accidents would not be

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[11] The Petition for Rulemaking does not request a waiver of Commission regulations pursuant to 10 C.F.R. § 2.335. The Petition for Rulemaking clearly requests that the Commission rescind, not waive, regulations in Part 51. Furthermore, the Petition for Rulemaking makes no attempt to address the *Millstone* factors for wavier of generic environmental findings in license renewal proceedings. *Millstone*, CLI-05-24, 62 NRC at 559-60. The four *Millstone* factors are: (i) the rule's strict application "would not serve the purposes for which [it] was adopted;" (ii) the movant has alleged "special circumstances" that were "not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived;" (iii) those circumstances are "unique" to the facility rather than "common to a large class of facilities;" and (iv) a waiver of the regulation is necessary to reach a "significant safety problem." *Id.* Thus, even if the Petition for Rulemaking on its own or in combination with the Petition is viewed as a request for waiver, the Intervenors have not demonstrated, inter alia, "special circumstances" that are unique to Indian Point. In fact, the Intervenors admit that "it may be more appropriate for the NRC to consider [the TFR's conclusions and recommendations] in generic rather than site-specific environmental proceedings." Petition at 4.

expected to have a significant impact on total risk for the site because the spent fuel pool accident risk level is less than that for a reactor accident." *Id*. at 37 (quotations omitted). Thus, these generic findings, codified in NRC regulations, are not subject to challenge absent a waiver of their application in a particular adjudicatory proceeding. *See* 10 C.F.R. § 2.335(a); *Turkey Point*, CLI-01-17, 54 NRC at 11, 16. The Intervenors have not petitioned for a waiver of the generic determinations in Table B-1 in this proceeding. Therefore, the Contention is inadmissible.

C. The Contention is Beyond the Scope of this Proceeding Because it Challenges the Commission's Regulations in 10 C.F.R. §§ 51.45(c) and 51.53(c)

The Intervenors' Contention is beyond the scope of this proceeding because it impermissibly challenges the Commission's regulations in 10 C.F.R. §§ 51.45(c) and 51.53(c)(2). Citing 10 C.F.R. § 51.45(c), the Intervenors assert that the Indian Point FSEIS must "include consideration of the economic, technical, and other benefits and costs of the proposed actions an alternatives." Intervenors then assert, based on their reading of the TFR's recommendations, that severe accidents must be considered within the scope of design basis accidents and that all severe accident mitigation measures must be implemented without regard to cost. Petition at 13-14. The Intervenors then assert, based on Dr. Makhijani's declaration, that the cost of implementing severe accident mitigation measures could be so significant that "other alternatives such as the no-action alternative and other alternative electricity production sources could be more attractive" and that these costs must be considered pursuant to 10 C.F.R. § 51.45(c). *Id.* at 13 – 14.

The Intervenors' assertions are not supported under 10 C.F.R. § 51.45(c) because the portion of § 51.45(c) Intervenors rely upon does not apply to license renewal. Section 51.45(c) clearly states: "Environmental reports prepared at the license renewal stage "need not discuss the economic or technical benefits and costs of either the proposed action or alternatives …." Section 51.45(c) further states: "environmental reports prepared under § 51.53(c) [i.e., at the

license renewal stage] need not discuss issues not related to the environmental effects of the proposed action and its alternatives." Section 51.53(c)(2) reiterates this, stating:

> The report is not required to include discussion of need for power or the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such costs and benefits are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. The environmental report need not discuss other issues not related to the environmental effects of the proposed action and the alternatives.

Thus, to the extent the Intervenors contend that the costs (or benefits) of implementing the TFR recommendations need to be considered for license renewal, they are requesting that Indian Point's FSEIS consider matters they are not required by the regulations to consider. Thus, rather than relying on the rule supporting the Intervenors' claims, Intervenors are in fact challenging the rule, something they cannot do, absent a waiver, in an individual licensing proceeding. 10 C.F.R. § 2.335. Consequently, the Contention is beyond the scope of this proceeding.

D. Emergency Planning Issues Raised by the Contention are Beyond the Scope of this Proceeding

The basis statement of the Contention asserts that the Indian Point FSEIS fails to satisfy NEPA because it does not address the environmental implications of the TFR's recommendations. Later in the Petition, however, the Intervenors assert that their Contention would be moot if all of the TFR's recommendations are adopted by the Commission. Petition at 17. Recommendations 9-11 in the TFR are related to emergency planning. TFR at ix. The Commission has clearly stated that emergency planning issues are not within the scope of license renewal proceedings. *Turkey Point*, CLI-01-17, 54 NRC at 9. Therefore, to the extent the Contention seeks implementation of TFR recommendations related to emergency planning, it is inadmissible.

E. The Contention is Beyond the Scope of the Proceeding Because it is a Generalized Attack on the Commission's Safety Regulations and the Adequacy of the Indian Point Current Licensing Basis for Units 2 and 3

Although the basis statement of the Contention focuses on compliance with NEPA, a number of assertions in the Petition generally challenge the adequacy of the Commission's safety regulations and thus the adequacy of current licensing basis ("CLB") for Indian Point Units 2 and 3. These matters are beyond the scope of this license renewal proceeding. In this regard, the Intervenors assert, based upon their reading of the TFR and its recommendations, that the Commission's current regulatory requirements do not provide reasonable assurance of adequate protection because the Commission's regulations do not include "mandatory safety requirements for severe accidents." Petition at 7.[12] They assert that the Commission's current regulatory scheme "requires significant re-evaluation and revision in order to expand or upgrade the design basis for reactor safety recommended by the Task Force Report." Petition at 8. They do not, however, assert that the TFR's recommendations involve aging management for structures, systems, or components within the scope of license renewal review. Their assertion that "the contention would be moot if the Commission were to adopt all of the Task Force's Recommendations" further indicates that the Intervenors are challenging the general adequacy of the Commission's safety regulations, and are not simply seeking compliance with NEPA's procedural requirements." Petition at 17.

As discussed above (at 7), pursuant to 10 C.F.R. § 2.335(a), contentions challenging the adequacy of the Commission's regulations are beyond the scope of individual adjudicatory proceedings unless a waiver is requested and granted. "[A] petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express

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[12] This statement by the Intervenors is not accurate. For example, as the TFR states, the Commission has regulatory requirements for some beyond-design basis accidents in 10 C.F.R. § 50.63, Loss of All Alternating Current Power," 10 C.F.R. § 50.62 "Requirements for Reducing the Risk from Anticipated Transients without Scram (ATWS) for Light-Water-Cooled Nuclear Power Plants," and 50.54(hh), requiring procedures for mitigating beyond-design basis fires and explosions. *See* TFR at 16-17.

generalized grievances about NRC policies." *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999). Further, 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." *Duke Energy Corp.*, (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-01-20, 54 NRC 211, 212 (2001). 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." *Pilgrim*, CLI-10-14, 71 NRC__ (slip op. at 4-8).

Challenges to the adequacy of a plant's CLB, however, are beyond the scope of license renewal. *See Turkey Point*, CLI-01-17, 54 NRC 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). As stated above, the Intervenors do not assert that the TFR's recommendations are related to aging management. Thus, to the extent that the Contention seeks to challenge the adequacy of the Commission's safety regulations and the adequacy of the CLB for Indian Point Units 2 and 3 to provide reasonable assurance of adequate protection of public health and safety, it is beyond the scope of this proceeding and must be rejected.

Moreover, as noted above, the TFR contains a series of recommendations including proposed rulemakings and orders, which could in turn lead to license amendments. TFR at Appendix A. Therefore, many of these recommendations may require the NRC to conduct a NEPA review before implementing them. 10 C.F.R. §§ 51.85, 51.95. Consequently, in the event the Commission ultimately adopts any of the recommendations in the TFR, the agency will have an opportunity to fully consider the need to conduct an environmental impact assessment of those actions at that time.

II. The Petition Does Not Raise a Material Issue

A. The Task Force Report Makes Safety Recommendations That Do Not Relate to the Petition's Environmental Concerns

Pursuant to 10 C.F.R. § 2.309(f)(1)(iv), an admissible contention must "[d]emonstrate 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." *See also* 10 C.F.R. § 2.309(f)(1)(vi) (stating that a contention must "provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact"). As discussed above, the Petition raises several challenges to the environmental review of the impacts of relicensing under NEPA. Petition at 12-18. The Petition rests its claims on the recently published TFR. But, the TFR addressed the safety, as opposed to the environmental, implications of the Fukushima accident. Consequently, the TFR is not material to the agency's environmental review. Moreover, as discussed below, to the extent it tangentially discusses environmental matters, the TFR supports the conclusion that the existing environmental analysis satisfies NEPA.

The Petition's new contention states, "The FSEIS for Indian Point license renewal fails to satisfy the requirements of NEPA because it does not address the new and significant environmental implications of the findings and recommendations raised by the NRC's Fukushima Task Force Report." Petition at 4. The Petition claims that the TFR is significant "because it raises an extraordinary level of concern regarding the manner in which the proposed renewed operation of Indian Point impacts public health and safety." *Id*. at 11 (quotations omitted). The Intervenors therefore "demand that the NRC comply with NEPA by addressing the lessons of the Fukushima accident in its environmental analysis for licensing decisions." *Id*. at 4.

But, the Petition does not raise a material dispute with the environmental portions of the application because it relies on the TFR, which makes safety recommendations to the Commission. While the recommendations in the TFR represent a step in the NRC's response

to the Fukushima accident, the Task Force was tasked with the assessment of safety issues, and its recommendations do not have any particular relevance to the Staff's environmental review. 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). In contrast, NEPA requires that "agencies take a hard look at environmental consequences" of major federal actions. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (internal quotations omitted). While the NRC may review similar topics under the two acts, the NRC's reviews under the two acts are distinct from each other. *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 730-31 (3d Cir. 1989). Thus, the NRC's evaluation of an issue under one act will not necessarily impact the agency's consideration of the issue under the other. *Id*.

The Commission established the Task Force following the Fukushima Dai-ichi accident to "conduct a methodical and systematic review of the NRC's process and regulations to determine whether the agency should make additional improvements to its regulatory system and to make recommendations to the Commission for its policy direction." TFR at 1. The Task Force first concluded that "a sequence of events like the Fukushima accident is unlikely to occur in the United States[.] Therefore, continued operation and continued licensing activities do not pose an imminent risk to public health and safety." TFR at vii. Nonetheless, the Task Force chose to recommend "significant reinforcements to NRC requirements and programs." *Id*. at 5. Consequently, the Task Force proposed to "redefine <u>what level of protection of the public health is regarded as adequate</u>." *Id*. at 4. In short, the Task Force addressed safety issues, rather than the environmental consequences of agency actions. In line with this focus, the Task Force proposed a list of safety enhancements to reinforce the NRC's existing regulatory structure. *Id*. at ix. While the Task Force made extensive findings and recommendations under the AEA, the

Task Force did not find that the Fukushima events have a direct impact on the NRC's environmental reviews of current licensing activities under NEPA, nor did it recommend that the NRC alter those reviews to account for Fukushima.

Thus, the TFR's findings are directed towards improving the NRC's regulatory framework for providing reasonable assurance that existing reactors will operate safely under the AEA. But, NEPA, the statute governing the Staff's environmental licensing review, contains a very different standard: it only requires agencies to take a "hard look" at the environmental consequences of their actions. *Methow Valley*, 490 U.S. at 350. The TFR's recommendations leave in place the agency's existing regulatory requirements; the Task Force's recommendation that the NRC take additional steps to ensure adequate protection do not point to any inadequacy in the NRC's consideration of environmental impacts in this proceeding. As a result, the conclusions in the TFR are immaterial to the NRC Staff's environmental review, and therefore the Board should deny admission of this contention, which is based exclusively on those findings. 10 C.F.R. § 2.309(f)(1)(iv), (vi).

Moreover, to the extent the TFR considers environmental consequences, the TFR supports the reasonableness of existing environmental reviews. The TFR states, "The current NRC approach to land contamination relies on preventing the release of radioactive material through the first two levels of defense-in-depth, namely protection and mitigation." TFR at 21. The TFR observes that land contamination cannot occur in the absence of a release of radioactive materials and concludes that "the NRC's current approach to the issue of land contamination from reactor accidents is sound." *Id*. Additionally, the TFR concludes that the defense-in-depth philosophy should occupy a central place in the future regulatory framework. *Id*. at 20. Therefore, if anything, the recommendations in the TFR support the NRC's existing approach to considering environmental impacts.

B. The Petition Does Not Identify the Specific Portions of the Application It Challenges

Pursuant to 10 C.F.R. § 2.309(f)(vi), a proffered contention must "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 . . . that the petitioner disputes" or reasons why the application omits required information. "On environmental matters this showing must include a reference to the specific portion of the applicant's environmental report that the petitioner believes inadequate." *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-12, 37 NRC 355, 363 (1993). If the Staff has published its own environmental documents, and the data and conclusions in those documents significantly differ from the information in the environmental report, then the Petitioner may also base a contention on errors or omissions in the Staff's environmental documents. *Id*. One purpose of these strict admissibility rules is to "put other parties sufficiently on notice of the issues so that they will know generally what they will have to defend against or oppose." *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13, 20 (1974).

The Intervenors' claims fail to reference the specific portion of the Indian Point application they dispute. The Petition raises claims challenging the analysis of severe accidents generically, Petition at 12-13, the requirement that only cost beneficial SAMAs be implemented, Petition at 13-15, the reliability of the site specific analysis of SAMAs on certain issues raised by the TFR, Petition at 16-18, and the determination of the need for power of the facility, Petition at 13-14. But, these claims do not identify the specific portions of the underlying license renewal application or the site-specific environmental analysis they dispute. Instead, they rely on general references to regulations and generic environmental determinations. Petition at 12-18 & n. 7. For example, these claims reference the entries on accidents in "Appendix B to 10 C.F.R. Part 51" *id*. at 12, and 10 C.F.R. 51.45(c), *id*. at 15. But, the entries on accidents in

Appendix B rest on an analysis in the GEIS that constitutes an entire chapter of often complex probabilistic risk analysis. GEIS at Chapter 5. The Intervenors' failure to challenge a specific part of Chapter 5 of the GEIS results in a claim that is too vague to raise a material dispute with the application. Likewise, the SAMA analysis in the Indian Point FSEIS incorporates a complex probabilistic risk assessment. The Petition's vague reference to the general description of the analysis provides no real insight into what portions of the analysis the Petition seeks to challenge. Rather, the Petition requires the Board, Staff, and Applicant to guess how the safety recommendations in the TFR specifically impact the environmental analysis of SAMAs in the FSEIS. Therefore, the Petition does not put other parties to this proceeding on sufficient notice of the issues it seeks to litigate. *Peach Bottom*, ALAB-216, 8 AEC at 20.

Consequently, the Petition does not provide sufficiently specific references to the portions of the application or Staff environmental documents that it seeks to contest. 10 C.F.R. § 2.309(f)(1)(iv). Instead, it refers to generic regulations and general portions of the FSEIS. As a result, the contention only vaguely suggests how the conclusions in the TFR, which as discussed above are safety recommendations with no inherent connection to environmental concerns, impact the Staff's or Applicant's Indian Point environmental analysis.[13] Hence, it does not raise a material dispute. 10 C.F.R. § 2.309(f)(1)(vi).

C. The Petition Does Not Raise a Material Issue with Respect to Severe Accidents

The Petition claims that the recommendations in the TFR question the determination that "the environmental impacts of both design basis accidents and severe accidents are small" in

[13] A number of intervenors in other cases filed requests containing "substantially similar" claims to those in the Petition. Petition at 3. The filing of substantially similar contentions in numerous proceedings does not satisfy an intervenor's obligation to comply with the Commission's strict requirement for specificity in pleading. *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989) ("The Commission expects parties to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point. The Commission cannot be faulted for not having searched for a needle that may be in a haystack.").

Appendix B to 10 C.F.R. Part 51 ("Appendix B"). Petition at 12. The Petition argues that because the TFR suggests that the Commission should expand the design basis of existing reactors to include additional accident scenarios, the existing analysis of accidents from an environmental perspective must be deficient. *Id*. at 12-13 (quoting Makhijani Declaration, paras. 7-10). As discussed above, this challenge to the Commission's regulations is outside the scope of this proceeding. *See* discussion *supra*, Section I.B. Moreover, even if this claim were within the scope of this license renewal proceeding, it is not material.

The conclusions in Appendix B rest on the data and analysis in the GEIS. The GEIS examines both design-basis accidents and severe accidents. GEIS at 5-11. "[D]esign-basis accidents are those that both the licensee and the NRC staff evaluate to ensure that the plant meets acceptable performance criteria." *Id*. In contrast, severe accidents include those accidents "involving multiple failures of equipment or function and, therefore, whose likelihood is generally lower than the design-basis accidents but where the consequences may be higher." *Id*. at 5-1.

The TFR does recommend "formally establishing, in the regulations, an appropriate level of defense-in-depth to address requirements for 'extended' design-basis events." TFR at 20. But, as discussed above, the purpose of the NRC's review under NEPA is to simply consider the environmental impacts of the particular proposed licensing action, not to form conclusions under the AEA. *Methow Valley*, 490 U.S. at 350. As currently written, the GEIS, which supports the NRC's determination on the environmental impacts of accidents in Appendix B, considers the environmental impacts of <u>both</u> design-basis accidents and severe accidents (i.e., beyond design-basis accidents). GEIS at 5-11. The TFR recommends expanding the scope of accidents explicitly considered in the regulations. TFR at 20. These recommendations include measures related to seismic events, floods, station blackouts, and spent fuel pools. TFR at ix. But the Petition does not allege that the TFR identifies a fundamentally new type of accident or a newly discovered consequence from already-considered accidents. Petition at 12-19. In fact

the GEIS explicitly considered seismic events, flooding, station blackout, and spent fuel pools in its analysis of severe accidents. GEIS at 5-17 to 5-18, 5-9, 5-100. Therefore, regardless of whether a given accident is classified as severe or design-basis, the NRC has already considered its environmental impacts in the GEIS for NEPA purposes. GEIS at 5-11. The recommendations in the TFR that the NRC expand the scope of design-basis accidents are not material to this environmental consideration.

In a related claim, the Petition asserts that "the risks of operating Indian Point under a renewed license are higher than estimated in the NRC Staff's [FSEIS]." Petition at 2. Additionally, the Intervenors claim that the TFR indicates that the NRC must reevaluate the "seismic and flooding hazards at the Indian Point site." Petition at 15. In support, the Makhijani declaration asserts that the TFR "indicates that seismic and flooding risks as well as risks of seismically-induced fires and floods may be greater than previously understood." Makhijani Declaration, par. 11. "Therefore in its environmental analyses, the NRC would have to revise its analysis to reflect the new understanding that the risks and radiological impacts of accidents are greater than previously thought." *Id*.

As discussed above, the NRC made a generic conclusion regarding the environmental impacts of accidents in Appendix B and these determinations cannot be challenged in individual proceedings absent a waiver. 10 C.F.R. § 2.335. The GEIS supports the conclusions in Appendix B. However, in considering the environmental impacts of severe accidents caused by external events, the GEIS did not rely on a quantitative assessment that was specific to external events. GEIS at 5-18. The GEIS noted that externally-initiated severe accidents "have not traditionally been discussed in quantitative terms." GEIS at 5-17. But, the GEIS noted that where the NRC had evaluated severe accidents generated by external events, the "risks were determined to be comparable to internal event risks." *Id*. Thus, the GEIS found that "[s]evere accidents initiated by external phenomena such as tornadoes, floods, earthquakes, fires, and sabotage" were "adequately addressed by generic consideration of internally initiated severe

accidents." GEIS at 5-18 to 5-19. In essence, whether a man-made event or an act of God results in a severe accident, the environmental impact is the same. Finally, the Commission noted that it would continue to evaluate methods "to reduce the risk from nuclear power plants from external events." *Id*.

Therefore, the conclusions in the TFR questioning the frequency of some externally-generated accident scenarios, such as earthquakes and flooding, do not raise a material dispute with the conclusions in the GEIS. The TFR based its recommendations on whether existing regulations ensure adequate protection under the AEA. The GEIS, which does not consider adequate protection but rather, evaluates generic environmental impacts, did not rely on a quantitative assessment of the specific risks posed by seismic and flooding events. Consequently, recommendations in the TFR regarding the frequencies of those events cannot undermine the conclusions in the GEIS on those topics. Moreover, the GEIS contemplated that the NRC would continue to study, and reduce, the risk from external events. The TFR does precisely that. Therefore, the conclusions in the TFR do not dispute the conclusions in the GEIS but fulfill them. As a result, the Board should reject the arguments in the Petition that challenge the determination in the GEIS that the environmental impacts of accidents will be small because those arguments do not raise a material dispute with the GEIS's analysis. 10 C.F.R. § 2.309(f)(1)(iv), (vi).

D. The Petition Does Not Raise a Material Challenge to the SAMA Analysis

1. NEPA Does Not Require Implementation of Mitigation Measures

Next the Petition claims that the TFR "recommends that severe accident mitigation measures should be adopted into the design basis . . . *without regard to their cost*." Petition at 13 (emphasis in original). "Thus, the values assigned to the cost-benefit analysis for Indian point SAMAs, as described in Section 5.2 of the FSEIS, must be re-evaluated in light of the Task Force's conclusion that the value of SAMAs is so high that they should be elected as a

matter of course." *Id*. As a result, the Petition appears to assert that SAMAs should be "imposed as mandatory measures." *Id*.

As discussed below, the Petition is incorrect in its assessment that the TFR recommends that the Commission should require licensees to implement all SAMAs, regardless of cost-benefit.[14] *See* discussion *infra*, Section III.A. While the TFR reached conclusions regarding additional steps the NRC can undertake to improve safety, these conclusions were part of the TFR's safety evaluation. Thus, the TFR based its proposals on redefining "what level of protection of the public health is regarded as adequate." 10 C.F.R. § 50.109(a)(4)(iii).

To be sure, in the event that the Commission should determine to expand the scope of design basis accidents to provide reasonable assurance of adequate protection, it would do so without regard to cost considerations. SAMAs, however, are different. The NRC conducts its evaluation of an applicant's SAMA analysis to satisfy the requirements of NEPA, not the AEA. 10 C.F.R. § 51.53(c)(3)(ii)(L); *Limerick*, 869 F.2d at 730-31. In contrast to "adequate protection" requirements, an analysis of costs and benefits is an integral part of a SAMA evaluation. Nonetheless, the outcome of a SAMA cost-benefit analysis does not mandate the adoption of a SAMA. The Supreme Court directly considered whether NEPA requires mitigation in *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989). The Court noted that while NEPA announced sweeping policy goals, "NEPA itself does not mandate particular results, but simply prescribes the necessary process." *Id.* at 350 (ci*ting Stryker's Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223, 227-28(1980) and *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519, 558 (1978)). "If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs.'" *Id.* (ci*ting Stryker's*

[14] In fact, the TFR does not mention the term SAMA.

Bay Neighborhood Council, 444 U.S. at 227-28, (*quoting Kleppe v. Sierra Club,* 427 U.S. 390, 410 n.21 (1976))). In light of these principles, the Court found a

> fundamental distinction … between a requirement that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated on the one hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted on the other.

Id. at 352. Thus, the Court concluded that the lower court erred in "in assuming that NEPA requires that action be taken to mitigate the adverse effects of major federal actions." *Id*. at 353 (internal quotations omitted). As a result, contrary to the Petition's assertions, NEPA imposes no obligation on the NRC to require mitigation.

Consequently, to the extent the Petition claims that the current SAMA analysis is inadequate because it does not require the Applicant to implement all of the identified mitigation measures regardless of cost, the Petition does not raise a material dispute. The claim that the SAMA analysis must require mitigation of all identified SAMAs is not material to the NRC's review under NEPA, because NEPA contains no requirement that the agency impose mitigation.

2. The Petition Does Not Raise a Material Dispute on Any Specific SAMA

Next, the Petition asserts that the SAMA analysis should consider "what, if any, design measures could be implemented (i.e. through NEPA's requisite 'alternatives' analysis) to ensure that the public is adequately protected from" seismic and flooding risks. Petition at 15. Additionally, the Petition asserts that the SAMA analysis should consider additional mitigation measures discussed by the TFR. *Id*. at 15 – 16. These mitigation measures include "strengthening SBO mitigation capability," installing hardened vent designs at facilities with BWR Mark I and Mark II containments,[15] "enhancing spent fuel pool makeup capability and

[15] This claim is obviously immaterial to this proceeding because Indian Point Units 2 and 3 are pressurized water reactor. LRA at 1.2-1.

instrumentation for the spent fuel pool," improving emergency response capabilities, and "addressing multi-unit accidents." *Id*. at 16.

But, the Intervenors have failed to show that the existing SAMA analysis is inadequate. In this regard, the Commission has stressed, the "ultimate concern" for a SAMA analysis "is whether any additional SAMA should have been identified as potentially cost beneficial, not whether further analysis may refine the details in the SAMA NEPA analysis." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009). "Unless it looks genuinely plausible that inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the SAMA candidates evaluated, no purpose would be served to further refine the SAMA analysis, whose goal is only to determine what safety enhancements are cost-effective to implement." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (*Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 317 (2010).

When intervenors propose consideration of an additional mitigation measure, the Commission has required them to provide a "ballpark figure for what the cost of implementing this SAMA might be." *Duke Energy Corporation* (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 12 (2002). The Commission is unwilling "to throw open its hearing doors to Petitioners who have done little in the way of research or analysis, provide no expert opinion, and rest merely on unsupported conclusions about the ease and viability of their proposed SAMA." *Id*. Thus, the Commission has found that a "conclusory statement that an envisioned SAMA 'would not pose a great challenge' is insufficient." *Id*. Such a statement provides no indication of "what logistical or technical concerns might be involved in implementing" the proposed SAMA. *Id*. In light of this holding, the Board in the *Indian Point* license renewal proceeding denied admission of a contention requesting consideration of a fire protection SAMA because the petitioner had not "provided any

information indicating the potential costs associated with the upgrade in fire protection." *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), LBP-08-13, 68 NRC 43, 104 (2008).

In this case, the Petition relies on the Makhijani Declaration to support its request that the SAMA analysis "consider the use of these additional mitigation measures to reduce the project's environmental impacts." Petition at 15 – 16. But, the Makhijani Declaration only provides vague estimates on the cost of these potential SAMAs. With respect to seismic and flooding issues, the Makhijani Declaration states that a reassessment of those concerns "may also involve increased costs due to required backfits." Makhijani Declaration at par. 19. Next, the Makhijani Declaration concludes that the TFR's recommendation to further analyze station blackout events "could result in the imposition of costly prevention or mitigation measures." *Id*. at ¶ 20. With regard to hardened vents for the BWR Mark I and II reactors, the declaration speculates that the cost of such improvements is "likely to be substantial." *Id*. at ¶. 21. Last, the declaration finds that implementing mitigation measures for multi-unit accidents "could be significant." *Id*. at ¶ 24.

Notwithstanding these generalized assertions, the Petition and Makhijani Declaration do not raise a material SAMA contention, because the Petition asks the NRC to consider additional SAMAs without providing an adequate indication of what the additional SAMAs may cost. Rather, the Makhijani Declaration relies on vague assertions that the cost of certain mitigation measures may be significant. But, such conclusory statements do not amount to even a "ballpark figure" for what the proposed SAMAs may cost. *McGuire/Catawba*, CLI-02-17, 56 NRC at 12. Rather, they are akin to the claims that a given SAMA "would not pose a great challenge," which the Commission has explicitly rejected. *Id*. Consequently, the statements do not provide sufficient support to show that the Petition's SAMA claim raises a material issue because they do not provide an adequate indication of what the cost of the mitigation measures may be. Without a quantitative estimate of the costs of a given SAMA, conducting a meaningful cost-benefit analysis of the SAMA under NEPA is impossible. Moreover, the claims in the

Petition and Makhijani Declaration do not specifically address any current SAMAs, let alone explain how the information in the TFR could lead to any of them becoming cost-beneficial. Because these claims do not provide sufficient information to demonstrate materiality, they should be rejected. 10 C.F.R. § 2.309(f)(1)(iv), (vi).

E. The Petition Does Not Raise a Material Claim with Respect to Need for Power

Last, the Petition alleges that "consideration of the costs of mandatory mitigative measures could affect the overall cost-benefit analysis for the reactor" because "these costs may be significant, showing that other alternatives such as the no-action alternative and other alternative electricity production sources may be more attractive." Petition at 13. As discussed above, these claims are outside the scope of license renewal. *See* discussion *supra*, Section I.C. Even if this claim was in scope, it would still not raise a material issue. If the NRC concludes that proposed mitigation measures in the TFR are necessary to provide a reasonable assurance of adequate protection, the NRC will require licensees to implement them as part of its ongoing oversight review of operating reactors, without regard to cost. These measures will apply to all facilities regardless of whether they are currently the subject of a pending license renewal application. As a result, the costs associated with complying with any TFR recommendations are immaterial to the decision of renewing an existing license.

Further, the fact that a license renewal proceeding is in progress does not render these issues admissible. In defining the scope of the license renewal rule, the Commission has previously explained, "It is not necessary for the Commission to review each renewal application against standards and criteria that apply to newer plants or future plants in order to ensure that operation during the period of extended operation is not inimical to the public health and safety." Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,945 (Dec. 13, 1991). "Ongoing regulatory processes provide reasonable assurance that, as new issues and concerns arise, measures needed to ensure that operation is not inimical to the public health and safety and common defense and security are 'backfitted' onto the plants." *Id*.

As discussed above, the TFR includes several recommendations to enhance safety at existing and proposed nuclear reactors that relate to redefining the level of adequate protection. *See supra*, Discussion Section II.A (*citing* TFR at ix). Consequently, to the extent the NRC ultimately adopts any specific recommendations from the TFR, it will do so under its on-going reactor regulatory oversight and rulemaking processes. Any such action would apply to both existing and renewed operating licenses.

Therefore, the Petition's claim that compliance with the TFR recommendations could change the cost-benefit analysis underlying the need for power analysis is not material to this proceeding. As discussed above, the NRC must have reasonable assurance of adequate protection for existing reactors. 42 U.S.C. § 2232(a). If the NRC changes the regulatory process to redefine the level of adequate protection, then the NRC will make those changes as part of its ongoing oversight of operating reactors. 10 C.F.R. § 50.109. Consequently, licensees must address those changes regardless of whether the NRC grants or denies their applications for license renewal or has already granted a renewed license. As a result, the costs of complying with any proposal in the TFR are irrelevant to the decision to renew the license. Therefore, even if this claim were within scope of this proceeding, it is immaterial and should be rejected. 10 C.F.R. § 2.309(f)(1)(iv)(vi).

III. The Petition Does Not Rely on an Adequate Factual Basis

The Intervenors' contention is inadmissible because it lacks an adequate factual basis. The Petition makes numerous misrepresentations of the TFR, including, *inter alia*, implying that the TFR questions whether the NRC can conduct reactor licensing activities in a manner that maintains public health and safety, claiming that the TFR effectively recommends that the process for considering Severe Accident Mitigation Alternatives (SAMAs) be overhauled, and that all SAMAs be incorporated regardless of cost. Nowhere does the TFR make these recommendations, nor do the Intervenors point to any specific language in the TFR to support their claims. Additionally, although the Petition frequently refers to the accompanying Makhijani

Declaration, that document does not provide sufficient information to support the Petition's claims. Finally, the Petition also misstates the standard for examining new information under the Supreme Court ruling in *Marsh v. Oregon*.

To present an admissible contention, the Petitioner must:

> [p]rovide 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[.]

10 C.F.R. § 2.309(f)(1)(v). The Commission has stated that "[m]ere 'notice pleading' is insufficient under these standards." *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003). A petitioner meets its pleading burden by providing "plausible and adequately supported claims." *Id*. While the Commission does not "expect a petitioner to prove its contention at the pleading stage," the Commission does require a petitioner to "show a genuine dispute warranting a hearing." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004). Thus, a petitioner, and its expert, must demonstrate how the relied-upon facts support its contention. *See id*; *see also USEC Inc.* (American Centrifuge Plant), CLI-06-09, 63 NRC 433, 442-43 (2006) (dismissing as inadequate support expert testimony that merely outlined future research and did not describe any facts on a project's impacts to support an "impacts" contention); *S. Carolina Elec. & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 & 3), CLI-10-1, 71 NRC 1, 18 n.84 (2010) (an expert opinion offering "unsupported assertions" and failing to provide a specific challenge to the applicant's analysis was insufficient for admissibility purposes).

A. None of the TFR's Recommendations Relate to SAMAs

The Intervenors claim that the TFR effectively recommends overhauling how the NRC considers SAMAs. Petition at 12. However, the TFR makes no reference whatsoever to SAMAs. The TFR does make reference to levels of probable risk assessments (PRA), but that

discussion does not reference PRA levels in the SAMA context. TFR at 21-22. As NRC Staff experts have explained in other license renewal proceedings, PRAs have traditionally been divided into three levels: level 1 is the evaluation of the combinations of plant failures that can lead to core damage; level 2 is the evaluation of core damage progression and possible containment failure resulting in an environmental release for each core-damage sequence identified in level 1; and level 3 is the evaluation of the consequences that would result from the set of environmental releases identified in level 2.[16] All three levels of the PRA are required to perform a SAMA analysis. Bixler and Ghosh Testimony at 8. The TFR states that its recommendations "could be implemented on the basis of full-scope Level 1 core damage assessment PRAs and Level 2 containment performance assessment PRAs." TFR at 21. However, the TFR "has not recommended including Level 3 PRA as a part of a regulatory framework." *Id.* at 22. Moreover, the Task Force specifically disclaimed any intent to require a Level 3 PRA as part of its recommendations at a subsequent public meeting with the Commission. Briefings on the Task Force Review of NRC Processes and Regulations Following the Events in Japan at 48 (Jul. 19, 2011) (ADAMS Accession No. ML112020051). Since the TFR does not recommend a Level 3 PRA analysis and the Task Force specifically rejected the idea during its presentation to the Commission, the conduct of a Level 3 PRA is not part of its recommendations.

Intervenors also claim, based on the TFR, that all SAMAs should be implemented regardless of cost. Petition at 13. The TFR does make some discrete recommendations, but none of those come close to recommending that SAMAs be implemented regardless of cost. Intervenors support their claim by stating that such measures are required to meet adequate health and safety requirements under the AEA. Petition at 13. As discussed above, this

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[16] NRC Staff Testimony of Nathan E. Bixler and S. Tina Ghosh Concerning the Impact of Alternative Meteorological Models on the Severe Accident Mitigation Alternatives Analysis, at 78 (Jan. 3, 2011) (ADAMS Accession No. ML110030966) ("Bixler and Ghosh Testimony").

justification is inaccurate because the requirements for meeting the AEA's requirements for health and safety are distinct from NEPA's cost-benefit analysis requirements. *See* discussion *supra* Section I.A.

B. Dr. Makhijani's Declaration Does Not Support the Petition's Claims

In addition to relying on the TFR, the Petition also makes several references to a declaration from Dr. Makhijani. However, Dr. Makhijani's declaration provides no support for the Contention apart from its discussion of the TFR, and it provides no discussion of the Applicant's environmental report or the Staff's site-specific FSEIS for Indian Point.

Thus, Dr. Makhijani expresses his agreement with the TFR's conclusions regarding the need to expand the design basis accident requirements for reactors. Makhijani Decl. at 3, 4. He sees the NRC's regulations as inadequate. *Id.* But, his concerns with the NRC's safety rules and his desire that the safety rules be changed are too far removed from the content of the NRC's site-specific environmental impact statement to support an admissible contention. Rather, Dr. Makhijani provides a generalized opinion about the potential effects of the TFR's recommendations upon environmental analyses for new reactors, existing reactor license renewal, and standardized design certification. Makhijani Decl. at 4. He claims that if the TFR's recommendations became requirements, then reactor designs would change and environmental analyses would change. *Id.* However, these statements are irrelevant to the proffered contention. Stating that under a different regulatory scheme, a different NEPA result may occur simply does not provide support for a claim that the environmental review at hand is deficient under the existing regulatory scheme.

Dr. Makhijani also states that the TFR finds that earthquake and flood risks might be greater than previously thought. Makhijani Decl. at 4. From this, he concludes that if the risks are found to be different, then the environmental documents must change. *Id.* But, this assertion amounts to speculation. The assertion is too far removed from the environmental documents at issue to provide support for the Petition. Moreover, even if the TFR's safety

recommendations did affect the analysis in the environmental documents, nothing in the declaration suggests that the change would be large enough to alter any of the existing conclusions on the environmental impacts of relicensing.

Dr. Makhijani asserts that in the event the Commission adopts the recommendations in the TFR, reactor site selection and cost-benefit analysis could be affected. *Id.* at 4-5. Again, these forward looking statements are irrelevant to the proffered environmental contention; there are no new requirements that would impact site selection at this time. *See* discussion *supra*, Section I.C. Further, consideration of alternative sites is not required in the environmental documents for license renewal. 10 C.F.R. § 51.53(c)(2).

Finally, in some instances, Dr. Makhijani appears unfamiliar with the NRC's environmental review policy. For example, where Dr. Makhijani states that the NRC effectively disregarded a 1980 recommendation to modify the NRC's philosophy about reactor design and "Class Nine Accidents" (Makhijani Decl. at 3-4), the declaration appears unaware that of the fact that in June 1980, the NRC explicitly withdrew the previously-proposed "Class Nine Accident" philosophy for environmental reviews,[17] and announced that the agency's environmental assessments would include consideration of both the probability and consequences of radioactive releases associated with severe accidents, as described in the Commission's Statement of Interim Policy, Nuclear Power Plant Accident Considerations Under the National Environmental Policy Act of 1969, 45 Fed. Reg. 40101, 40102 (June 13, 1980). The Interim Policy Statement withdrew the proposed generic omission of "Class Nine" accidents in NRC environmental impact statements. *Id.* at 40103. Consequently, the Makhijani declaration does not form a sufficient basis for the Petition's claims.

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[17] As discussed in the Commission's Interim Policy Statement, a proposed Annex to 10 C.F.R. Part 50 Appendix D, published for comment on December 1, 1971, would have included consideration of Class 8 (design basis) accidents, and omitted consideration of Class 9 accidents in NRC environmental assessments. *See* Interim Policy Statement, 45 Fed. Reg. at 40102.

C. The TFR Does Not Question Whether the NRC Can Continue to License Reactors

The Intervenors state, as general support for their contention, that the Indian Point FSEIS must consider recommendations by the TFR because the TFR does not "report a conclusion that licensing of reactors would not be 'inimical to public health and safety,'" whereas the TFR makes a finding that continued license activities "are not inimical to the common defense and safety." *Id*. at 5 (quoting TFR at 18). On this issue, the Intervenors are mistaken. The TFR explicitly states that "the Task Force concludes 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." TFR at 18. The Intervenors base their argument on the TFR's use of the term "imminent risk" as opposed to "not inimical." However, there is nothing in the report that implies that continued operation is and continued licensing activities are inimical to the public health and safety. Therefore, Intervenors' argument that the TFR did not make the requisite finding of 'not inimical to the public health and safety' is inconsistent with the findings of the TFR.

D. Intervenors' Reliance on *Marsh v. Oregon* is Misplaced

Finally, the Intervenors' reliance on *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989) to justify admission of their new contention is misplaced. While the Supreme Court in *Marsh* established that an agency must take a "hard look" at significant new information, the Court also stated that "an agency need not supplement an EIS every time new information comes to light after the EIS is finalized." *Marsh*, 490 U.S. at 392. Such a requirement "would render agency decision making intractable, always awaiting updated information only to find the new information outdated by the time a decision is made." *Id.* at 373.

The D.C. Circuit further explained that "if new information shows that the remaining action will affect the quality of the environment in a significant manner or to a significant extent *not already considered*, a supplemental EIS must be prepared." *Nat'l Comm. for the New River*

v. FERC, 373 F.3d 1323, 1330 (D.C. Cir. 2004) (emphasis added) (internal quotes and citations omitted). However, "a supplemental EIS is only required where new information "provides a seriously different picture of the environmental landscape." *Id.* (quoting *City of Olmsted Falls v. FAA*, 292 F.3d 261, 274 (D.C. Cir. 2002)). The Commission additionally adopted this standard in *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-04, 53 NRC 31, 52 (2001), stating "[t]he new circumstance must reveal a seriously different picture of the environmental impact of the proposed project.''

In attempting to use *Marsh* to justify admission of their contention, the Intervenors are in effect claiming that the contention involves information that has not already been considered and provides a seriously different picture of the environmental landscape. As discussed above, the TFR is in essence a report on safety issues, and does not deal with environmental recommendations. *See* discussion *supra*, Section II.A. Since the Task Force doesn't purport to make environmental recommendations, the TFR does not change the environmental landscape. Therefore, the information does not satisfy the standard under *Marsh*. Nor do Intervenors present facts or expert opinion that a Fukushima type of event will occur at the Indian Point site or whether its impact will be the same or greater than that already considered in the GEIS and/or Indian Point FSEIS.

E. Conclusion

As discussed above, the quotations from the TFR and Makhijani declaration do not provide sufficient support for the claims in the Contention. The recommendations in the TFR do not relate to the NRC's environmental reviews in general or SAMA analyses in particular. Moreover, the Makhijani declaration is too speculative and general to provide a sufficient factual basis for the proffered contention. As a result, the proposed contention is inadmissible. 10 C.F.R. § 2.309(f)(1)(v).

IV. The Contention Is Untimely, Because the Issues Discussed in the Task Force Report Have Been Previously Available and Were Addressed in Intervenors' Previous Petitions and in the Commonwealth of Massachusetts' June 2, 2011 Filing.

The criteria to be considered when determining the timeliness of amended or new contentions filed after the original petition for intervention and request for hearing are set forth in 10 C.F.R.§ 2.309(f)(2). Under this provision, an amended contention filed after the initial filing period may be admitted with leave of the Board only upon a showing that:

> (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.[18]

A contention that does not qualify as a timely new contention under 10 C.F.R. § 2.309(f)(2) may be admissible under the provision governing nontimely contentions, 10 C.F.R. § 2.309(c). Nontimely filings may only be entertained following a determination by the Board that a balancing of the eight factors in 10 C.F.R. § 2.309(c) weigh in favor of admission.[19]

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[18] 10 C.F.R. § 2.309(f)(2).

[19] The eight factors listed at § 2.309(c)(1) are as follows:

> (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;

The requirements for untimely filings and late-filed contentions are '"stringent."'[20] All eight factors must be addressed by the petitioner.[21] Failure to comply with the pleading requirements is sufficient grounds for denial of the motion to amend or admit a new contention.[22] Of all the eight factors, the first, good cause for failure to file on time, is most important.[23]

The Commission has repeatedly addressed the issue of intervenors essentially waiting for the Staff to summarize the information into a convenient form to serve as the basis of a contention. Most recently in *Prairie Island*, the Commission stated that "[b]y permitting [intervenors] to wait for the Staff to compile all relevant information in a single document, the Board improperly ignored [intervenors'] obligation to conduct its own due diligence."[24] The Commission emphasized in *Oyster Creek* that

> [O]ur contention admissibility and timeliness rules require a high level of discipline and preparation by petitioners, who must examine the publicly available material and set forth their claims and the support for their claims at the outset. There simply would be no end to NRC licensing proceedings if petitioners could disregard our timeliness requirements and add new contentions at their convenience during the course of a proceeding based on information that could have formed the basis for a timely contention at the outset of the proceeding. Our expanding adjudicatory docket makes it critically important that parties

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> (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.

[20] *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-07, 69 NRC 235, 260 (2009). *See also Nuclear Management Co., LLC.* (Palisades Nuclear Power Plant), CLI-06-17, 63 NRC 727, 732 (2006).

[21] *Oyster Creek*, CLI-09-07, 63 NRC at 260.

[22] *Id*. at 260-61.

[23] *Id.* at 261.

[24] *See, e.g., Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC ___ (Sep. 30, 2010) (slip op. at 18).

> comply with our pleading requirements and that the Board enforce those requirements.[25]

Finally, the Commission stressed that intervenors have an "iron-clad obligation to examine the publicly available documentary material … with sufficient care to enable it to uncover any information that could serve as the foundation for a specific contention."[26]

In this case, the Intervenors assert that the late-filed contention is timely because it is "based upon information contained within the Task Force Report, which was not released until July 12, 2011."[27] The Motion claims that "[b]efore issuance of the Task Force Report, the information material to the contention was simply unavailable."[28] Nonetheless, Petitioner's own declarant, Dr. Makhijani, contradicts this argument by stating that the Task Force Report "provides further support for my opinions …."[29] Dr. Makhijani has previously provided his opinions to the Commission in support of multiple petitioners' requests to suspend licensing proceedings on April 19, 2011, more than four months prior to his most recent declaration.[30]

The Petition asserts that the TFR refutes the concept that "compliance with existing NRC safety regulations is sufficient to ensure that the environmental impacts of accidents are acceptable," and "fundamentally question[s] the adequacy of the current level of safety provided

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[25] *Oyster Creek*, CLI-09-7, 69 NRC 271-72 (footnotes and internal quotation marks omitted).

[26] *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 147 (1993) (internal quotation marks and footnote omitted). *Accord Shaw Areva MOX Services, LLC* (Mixed Oxide Fuel Fabrication Facility), CLI-09-2, 69 NRC 55, 65 n.47 (2009); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 386 (2002); *Turkey Point*, CLI-01-17, 54 NRC at 24-25.

[27] "Motion to Admit Riverkeeper, Inc. and Hudson River Sloop Clearwater, Inc. New Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the NRC Fukushima Task Force Report" at 3.

[28] *Id.*

[29] Declaration of Dr. Arjun Makhijani regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Dai-ichi Nuclear Power Station Accident at ¶ 6 (Aug. 8, 2011).

[30] Declaration of Dr. Arjun Makhijani in Support of Emergency petition to Suspend All Pending Reactor Licensing decisions and Related Rulemaking Decisions pending Investigation of Lessons learned from Fukushima Dai-ichi Nuclear Power Station Accident (April 19, 2011).

by the NRC's program for nuclear reactor regulation."[31] Dr. Makhijani's Declaration focused on these issues over four months ago.[32] Dr. Makhijani stated that "integration of the Fukushima data into NRC analyses of risks could lead to significant changes in design of new reactors and … modifications at existing reactors as would be required for protection of public health and safety …."[33] Dr. Makhijani concluded that "[i]n the environmental and health arenas, consideration of this significant new information is likely to result in higher accident probability estimates, new accident mechanisms for spent fuel pools, higher accident costs estimates, and higher estimates of the health risk posed by light water reactor accidents."[34] Thus, the issues presented here in the proffered contention were readily available and discussed by Intervenors' expert more than four months ago. At that time, the Intervenors chose to forgo filing contentions. As such, the late filed contention is not timely and should be denied.

In addition, even putting aside Dr. Makhijani's previous declaration, the Commonwealth of Massachusetts filed a report in support of its June 1, 2011 request for the admission of a new contention based on the Fukushima Dai-ichi event on June 1, 2011, 42 days prior to the publication of TFR.[35] The Commonwealth's declarant, Dr. Gordon Thompson, questioned the

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[31] "Motion to Admit Riverkeeper, Inc. and Hudson River Sloop Clearwater, Inc. New Contention Regarding NEPA Requirement to Address Safety and Environmental Implications of the NRC Fukushima Task Force Report" at 4.

[32] *See* Declaration of Dr. Arjun Makhijani regarding Safety and Environmental Significance of NRC Task Force Report Regarding Lessons Learned from Fukushima Dai-ichi Nuclear Power Station Accident at ¶ 24 (Aug. 8, 2011).

[33] *Id.* at ¶ 24.

[34] *Id.* at ¶ 35. *See also id.* at ¶¶ 29, 34, and 36.

[35] "New and Significant Information From the Fukushima Dai-ichi Accident in the Context of Future Operation of the Pilgrim Nuclear Power Plant," ("Thompson Report") (June 1, 2011) (ADAMS Accession No. ML111530339). In the response to "Commonwealth of Massachusetts' Contention Regarding New and Significant Information Revealed by the Fukushima Radiological Accident," the Staff's answer observed that the petition was likely premature because the Commonwealth had stated that its information was incomplete. In this regard, the reopening standard imposes significantly higher burden on the proponent to the contention than the late-filed contention requirements. In order to overcome the strict re-opening requirements, the Commonwealth needed to provide "more than mere allegations; it must be tantamount to evidence," *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear

adequacy of the NRC's current regulations.[36] Dr. Thompson asserted that the "NRC has been obliged to extend the regulatory arena beyond the plant's design basis."[37] He made this assertion based on the fact that "core melt is a forseeable event"[38] and the likelihood of core melts has been significantly underestimated by current PRA.[39] Dr. Thompson's June 1, 2011 declaration challenged the environmental analysis of environmental impacts under the current regulations.[40] Specifically, Dr. Thompson asserted that "any accident-mitigation measure or SAMA … should be incorporated in the plant's design basis."[41] Since the issues asserted by Intervenors as new were available as least as early as the report filed by the Commonwealth's expert, the late-filed contention should be dismissed as untimely, especially in light of the Commission's holding that Staff's documents which summarize information that has been previously disclosed elsewhere cannot serve as the basis for new information to support a late-filed contention.

V. Suspension Request

Additionally, the Petition notes that the Intervenors have also filed a rulemaking petition "seeking to suspend any regulations that would preclude full consideration of the environmental implications of the Task Force Report." Petition at 3. The rulemaking petition states that "the NRC has a non-discretionary duty to suspend the relicensing proceeding while it considers the

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Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1366 (1984), to overcome the strict requirements for reopening a closed record. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005). The reopening standard, of course, does not yet apply in the Indian Point proceeding.

[36] Thompson Report at 11.

[37] *Id.*

[38] *Id.*

[39] *Id.* at 14 – 17.

[40] Declaration of Dr. Gordon R. Thompson in Support of Commonwealth of Massachusetts' Contention and Related Petitions and Motions, at ¶ 16 (June 1, 2011).

[41] Thompson Report at 17 – 18.

environmental impacts of that decision, including the environmental implications of the Task Force report with respect to severe reactor and spent fuel pool accidents." Rulemaking Petition to Rescind Prohibition Against Consideration of Environmental Impacts of Severe Reactor and Spent Fuel Pool Accidents and Request to Suspend Licensing Decision, at 3 – 4 (Aug. 11, 2011) (ADAMS Accession No. ML11223A372). Other parties in other proceedings filed the same (or substantially identical) rulemaking petition before their boards and the Commission. Petition at 3

The rulemaking petition and the corresponding suspension request are not properly before this Board. Rather, they are currently before the Commission as part of a regulatory process that is distinct from this license renewal adjudicatory proceeding. Under 10 C.F.R. § 2.802(a), "Any interested person may petition the Commission to issue, amend or rescind any regulation." Section 2.802(d) states that the "petitioner may request the Commission to suspend all or any part of any licensing proceeding to which the petitioner is a party pending disposition of the petition for rulemaking." 10 C.F.R. § 2.802(d). Under the regulation's clear terms, only the Commission may grant a suspension request under 10 C.F.R. § 2.802(d).

Moreover, the Commission has set a high standard for suspending a proceeding under section 2.802(d). In considering a previous request to suspend under section 2.802(d), the Commission found "suspension of licensing proceedings a 'drastic' action that is not warranted absent 'immediate threats to public health and safety.'" In the Matter of Petition for Rulemaking to Amend 10 C.F.R. § 54.17(c), CLI-11-01, 73 NRC __ (Jan. 24, 2011) (slip op. at 3) ("Seabrook Order") (*quoting AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-08-23, 68 NRC 461, 484 (2008)). The Commission explained,

> [O]ur "longstanding practice has been to limit orders delaying proceedings to the duration and scope necessary to promote the Commission's dual goals of public safety and timely adjudication. Absent extraordinary cause, however, seldom do we interrupt licensing reviews or our adjudications — particularly by an indefinite or very lengthy stay as contemplated here — on the

> mere possibility of change. Otherwise, the licensing process would face endless gridlock.

Id. at 2-3. The Commission concluded that because ample time existed before it would issue a renewed license for Seabrook, the requestors had not shown that proceeding with the adjudication would "jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge from our important ongoing evaluation." *Id*. at 4.

CONCLUSION

For the reasons set forth above, the Board should find the contention inadmissible.

Respectfully submitted,

Signed (electronically) by

_____
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Dated at Rockville, Maryland
This 6th day of September 2011

ANSWER CERTIFICATION

The undersigned Counsel certifies that he has made a sincere effort to make himself available to listen and respond to the moving parties, and to resolve the factual and legal issues raised in the motion, and that his efforts to resolve the issues have been unsuccessful.

Signed (electronically) by

_____
Sherwin E. Turk
Counsel for NRC Staff

Dated at Rockville, Maryland
This 6th day of September 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket Nos. 50-247-LR/286-LR
	)	
(Indian Point Nuclear Generating Units 2 and 3)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF'S ANSWER IN OPPOSITION TO 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" in the above-captioned proceeding have been served on the following by Electronic Information Exchange this 6th day of September, 2011.

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