## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

#### **COMMISSIONERS:**

Gregory B. Jaczko, Chairman Kristine L. Svinicki George Apostolakis William D. Magwood, IV William C. Ostendorff

In the Matter of

ENTERGY NUCLEAR GENERATION COMPANY AND
ENTERGY NUCLEAR OPERATIONS, INC.

(Pilgrim Nuclear Power Station)

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(Pilgrim Nuclear Power Station)

#### CLI-12-03

## **MEMORANDUM AND ORDER**

Pilgrim Watch has filed a petition for review of LBP-11-23, in which the Licensing Board denied Pilgrim Watch's motions to admit two proposed new contentions challenging Entergy's Environmental Report based on the recent nuclear events in Japan.<sup>1</sup> For the reasons set forth below, we deny the petition for review.

### I. BACKGROUND

In May 2006, Pilgrim Watch submitted a request for hearing and petition for leave to intervene in this proceeding on Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.'s (together, Entergy) license renewal application for the Pilgrim Nuclear Power

<sup>&</sup>lt;sup>1</sup> Pilgrim Watch's Petition for Review of Memorandum and Order (Denying Pilgrim Watch's Requests for Hearing on New Contentions Relating to Fukushima Accident) Sept. 8, 2011 (Sept. 23, 2011) (Petition).

Station.<sup>2</sup> The Board granted the hearing request and admitted two of Pilgrim Watch's proposed contentions—Contentions 1 and 3.<sup>3</sup> Contention 1 challenged Entergy's aging management program for buried piping, and Contention 3 challenged certain aspects of the severe accident mitigation alternatives (SAMA) analysis in Entergy's Environmental Report.<sup>4</sup> Prior to the hearing, however, the Board granted summary disposition of Contention 3 in favor of Entergy.<sup>5</sup> About six months later, the Board held an evidentiary hearing on Contention 1.<sup>6</sup> The Board formally closed the record on June 4, 2008,<sup>7</sup> and the Board later resolved Contention 1 in Entergy's favor.<sup>8</sup> The Board terminated the proceeding.<sup>9</sup>

In response to Pilgrim Watch's petition for review, we reversed and remanded a portion of Contention 3 to the Board for hearing.<sup>10</sup> We expressly stated that the remand was "limited by [that] ruling."<sup>11</sup> Pilgrim Watch has since filed requests that the Board admit six new

<sup>&</sup>lt;sup>2</sup> Request for Hearing and Petition to Intervene by Pilgrim Watch (May 25, 2006) (Hearing Request).

<sup>&</sup>lt;sup>3</sup> LBP-06-23, 64 NRC 257, 348-49 (2006).

<sup>&</sup>lt;sup>4</sup> See id. at 349; Hearing Request at 3.

<sup>&</sup>lt;sup>5</sup> LBP-07-13, 66 NRC 131, 154 (2007); *id.* at 156-68 (Young, J., dissenting).

<sup>&</sup>lt;sup>6</sup> See Tr. at 557-874 (Apr. 10, 2008).

<sup>&</sup>lt;sup>7</sup> Memorandum and Order (Ruling on Pilgrim Watch Motions Regarding Testimony and Proposed Additional Evidence Relating to Pilgrim Watch Contention 1) (June 4, 2008), at 3-4 (unpublished).

<sup>&</sup>lt;sup>8</sup> LBP-08-22, 68 NRC 590, 610 (2008); *id.* at 611-53 (Young, J., concurring).

<sup>&</sup>lt;sup>9</sup> *Id.* at 610.

<sup>&</sup>lt;sup>10</sup> CLI-10-11, 71 NRC 287, 290 (2010).

<sup>&</sup>lt;sup>11</sup> *Id*.

contentions,<sup>12</sup> two of which are at issue here: (1) the "Fukushima Recriticality Contention," which argues that Entergy's SAMA analysis must account for a release of radioactive material for longer than the twenty-four-hour plume considered in the SAMA analysis, and longer than the MACCS2 code's four-day maximum plume duration;<sup>13</sup> and (2) the "Fukushima Direct Torus Vent Contention," which argues that Entergy's SAMA analysis must account for an increased probability of containment failure and subsequent larger offsite consequences due to failure of vents designed to relieve containment pressure.<sup>14</sup>

A majority of the Board, with Judge Young concurring in part and dissenting in part, rejected the contentions.<sup>15</sup> The majority found that Pilgrim Watch failed to address or meet the standards for reopening a closed record, that Pilgrim Watch did not timely raise the information underpinning the contentions, and that its contentions did not meet the general requirements for

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<sup>&</sup>lt;sup>12</sup> Five of the contentions, including the contentions at issue here, were filed during the pendency of the remand. On July 19, 2011, the Board issued a partial initial decision resolving Contention 3 in Entergy's favor. LBP-11-18, 74 NRC \_\_ (July 19, 2011) (slip op.), *petition for review denied*, CLI-12-1, 75 NRC \_\_ (Feb. 9, 2012) (slip op.). Since that time, Pilgrim Watch has filed an additional contention that challenges Entergy's SAMA analysis, also based on information relating to the events at Fukushima Daiichi. *See Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima* (Nov. 18, 2011).

<sup>&</sup>lt;sup>13</sup> Pilgrim Watch Request for Hearing on Post Fukushima SAMA Contention (May 12, 2011), at 1-3 (Recriticality Contention).

<sup>&</sup>lt;sup>14</sup> Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (June 1, 2011), at 1 (Direct Torus Vent Contention). In the final supplemental environmental impact statement (FSEIS) for this proceeding, the Staff reviewed Entergy's SAMA analysis and concluded that the analysis was "sound." "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 29, Regarding Pilgrim Nuclear Power Station" (Final Report), NUREG-1437 (July 2007), at 5-10 (ML072060320) (package) (FSEIS). See generally id. at app. G.

<sup>&</sup>lt;sup>15</sup> LBP-11-23, 74 NRC \_\_ (Sept. 8, 2011) (slip op.) (corrected and re-issued on Dec. 13, 2011).

contention admissibility. 16 Judge Young concurred in the result with regard to the Recriticality Contention, but would have admitted the Direct Torus Vent Contention. 17 In addition to her rulings on admissibility, however, Judge Young opined that Pilgrim Watch's contentions raised significant issues warranting *sua sponte* review. 18 Judge Young therefore recommended that we "consider having the Staff look more closely—take a 'hard look'—into the issues raised in these contentions, as well as any other issues arising out of the Fukushima Daiichi accident that relate particularly to Mark I BWR reactors, prior to any decision on the license renewal application," and supplement the Pilgrim FSEIS, as necessary. 19

Pilgrim Watch timely filed the instant petition for review. Entergy and the Staff ask us to deny the petition.<sup>20</sup> The Commonwealth of Massachusetts also filed an answer to Pilgrim Watch's petition, requesting that we hold our decision on the petition in abeyance, or, in the

<sup>&</sup>lt;sup>16</sup> See id. at (slip op. at 34-35, 41).

<sup>&</sup>lt;sup>17</sup> *Id.* at \_\_\_ (slip op., Administrative Judge Ann Marshall Young, Concurring in Part and Dissenting in Part, at 1) (Judge Young Separate Statement).

<sup>&</sup>lt;sup>18</sup> *Id.* at \_\_\_ (slip op., Judge Young Separate Statement at 54-55).

<sup>&</sup>lt;sup>19</sup> *Id*.

<sup>&</sup>lt;sup>20</sup> See Entergy's Answer Opposing Pilgrim Watch's Petition for Review (Oct. 3, 2011), at 25 (Entergy Answer); NRC Staff's Answer to Pilgrim Watch's Petition for Review of Memorandum and Order (Denying Pilgrim Watch's Requests for Hearing on New Contentions Relating to Fukushima Accident) (Oct. 3, 2011), at 2, 23 (Staff Answer). Pilgrim Watch filed replies to Entergy and the Staff. Pilgrim Watch Reply to Entergy's Answer to Pilgrim Watch's Petition for Review (Oct. 11, 2011); Pilgrim Watch Reply to NRC Staff's Answer to Pilgrim Watch's Petition for Review (Oct. 11, 2011).

alternative, strike one of Pilgrim Watch's references.<sup>21</sup> Massachusetts requests that we refrain from ruling on Pilgrim Watch's petition until the Board rules on Massachusetts' new contention, out of concern that our issuing a decision first could be prejudicial to Massachusetts' interests.<sup>22</sup> Alternatively, Massachusetts requests that we strike Pilgrim Watch's reference to the Thompson Declaration, which was filed in support of Massachusetts' new contention.<sup>23</sup> The Board has issued a decision rejecting Massachusetts' proposed contention and related filings.<sup>24</sup> Massachusetts' stay request and motion to strike therefore are moot.<sup>25</sup>

<sup>&</sup>lt;sup>21</sup> Commonwealth of Massachusetts Answer to Pilgrim Watch Petition for Review, Request to Stay Commission Decision or in the Alternative to Strike Reference to Massachusetts' Expert (Sept. 28, 2011) (Massachusetts Answer).

<sup>&</sup>lt;sup>22</sup> See id. at 1-2. See generally Commonwealth of Massachusetts' Contention Regarding New and Significant Information Revealed by the Fukushima Radiological Accident (June 2, 2011).

<sup>&</sup>lt;sup>23</sup> See Massachusetts Answer at 2; Petition at 5 n.3 (citing Declaration of Dr. Gordon R. Thompson in Support of Commonwealth of Massachusetts' Contention and Related Petitions and Motions (June 1, 2011); New and Significant Information from the Fukushima Daiichi Accident in the Context of Future Operation of the Pilgrim Nuclear Power Plant (June 1, 2011), at 17 (Thompson Report)). The Staff opposes Massachusetts' requests. NRC Staff's Answer to Commonwealth of Massachusetts' Request to Stay Commission Decision or in the Alternative to Strike Reference to Massachusetts' Expert (Oct. 11, 2011), at 6. Massachusetts moved to reply to the Staff's answer; the Staff also opposes this request. Commonwealth of Massachusetts Motion to Reply to NRC Staff Answer to Massachusetts' Request to Stay Commission Decision on Pilgrim Watch Appeal or in the Alternative to Strike Reference to Massachusetts' Expert (Oct. 17, 2011); NRC Staff's Answer in Opposition to Commonwealth of Massachusetts' Motion to Reply to Staff Response to Motion to Stay Commission's Decision on Pilgrim Watch's Appeal of Board Decision Denying Admission of Post-Fukushima Contentions (Oct. 27, 2011). We need not address these motions because this stay request and motion to strike are now moot.

<sup>&</sup>lt;sup>24</sup> LBP-11-35, 74 NRC \_\_ (Nov. 28, 2011) (slip op.).

<sup>&</sup>lt;sup>25</sup> In connection with its new contention, Massachusetts filed a waiver petition and conditional petition for rulemaking. *Commonwealth of Massachusetts' Petition for Waiver of 10 C.F.R. Part 51, Subpart A, Appendix B or, in the Alternative, Petition for Rulemaking to Rescind Regulations Excluding Consideration of Spent Fuel Storage Impacts from License Renewal Environmental Review* (June 2, 2011) (Conditional Petition for Rulemaking). Because the Board denied (continued...)

#### II. DISCUSSION

We will grant a petition for review at our discretion, giving due weight to the existence of a substantial question with respect to one or more of the following considerations:

- (i) a finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;
- (ii) a necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;
- (iii) a substantial and important question of law, policy, or discretion has been raised;
- (iv) the conduct of the proceeding involved a prejudicial procedural error; or
- (v) any other consideration which we may deem to be in the public interest.<sup>26</sup>

<sup>(...</sup>continued)

Massachusetts' waiver petition, Massachusetts asks that we now treat the request as a petition for rulemaking. See LBP-11-35, 74 NRC at \_\_\_ (slip op. at 70-71); Conditional Petition for Rulemaking at 30-31. Massachusetts also requests that we stay the proceeding pending consideration of its rulemaking petition. See Commonwealth of Massachusetts' Conditional Motion to Suspend Pilgrim Nuclear Power Plant License Renewal Proceeding Pending Resolution of Petition for Rulemaking to Rescind Spent Fuel Pool Exclusion Regulations (June 2, 2011), at 1-2. Additionally, Massachusetts and Pilgrim Watch have appealed the Board's ruling in LBP-11-35. Commonwealth of Massachusetts' Notice of Appeal of LBP-11-35 (Dec. 8, 2011); Commonwealth of Massachusetts' Brief in Support of Appeal from LBP-11-35 (Dec. 8, 2011); Pilgrim Watch's Petition for Review of Memorandum and Order (Denying Commonwealth of Massachusetts' Request for Stay, Motion for Waiver, and Request for Hearing on a New Contention Relating to the Fukushima Accident) Nov. 28, 2011 (Dec. 8, 2011). We will address these requests, and the appeals, separately.

<sup>&</sup>lt;sup>26</sup> 10 C.F.R. § 2.341(b)(4)(i)-(v). *Cf. South Texas Project Nuclear Operating Co.* (South Texas Project, Units 3 and 4), CLI-09-18, 70 NRC 859, 862 (2009) ("As a general matter, contentions filed after the initial petition are not subject to appeal pursuant to section 2.311.").

For threshold issues like contention admissibility, we give substantial deference to a board's determinations.<sup>27</sup> We will affirm decisions on the admissibility of contentions where we find no error of law or abuse of discretion.<sup>28</sup>

Motions to reopen the record are governed by 10 C.F.R. § 2.326 of our rules of practice. The movant must show that: (1) the motion is timely; (2) the motion addresses a "significant safety or environmental issue"; and (3) "a materially different result would be or would have been likely had the newly proffered evidence been considered initially." "Each of the criteria must be separately addressed, with a specific explanation of why it has been met."

The level of support required for a motion to reopen is greater than that required for a contention under the general admissibility requirements of 10 C.F.R. § 2.309(f)(1).<sup>31</sup> The motion to reopen "must be accompanied by affidavits that set forth the factual and/or technical bases for the movant's claim that the . . . [three criteria for reopening] have been satisfied."<sup>32</sup> "Evidence contained in [the] affidavits must meet the admissibility standards [in 10 C.F.R.

<sup>&</sup>lt;sup>27</sup> See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 119 (2009).

<sup>&</sup>lt;sup>28</sup> See Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), CLI-11-8, 74 NRC \_\_ (Sept. 27, 2011) (slip op. at 5-6); AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009).

<sup>&</sup>lt;sup>29</sup> 10 C.F.R. § 2.326(a)(1)-(3).

<sup>30</sup> *Id.* § 2.326(b).

<sup>&</sup>lt;sup>31</sup> Compare id., with id. § 2.309(f)(1)(v).

<sup>&</sup>lt;sup>32</sup> *Id.* § 2.326(b).

§ 2.337]."<sup>33</sup> That is, it must be "relevant, material, and reliable."<sup>34</sup> Further, the "[a]ffidavits must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised."<sup>35</sup> A litigant seeking to reopen a closed record necessarily faces a "heavy" burden.<sup>36</sup> After a record has closed, finality attaches to the hearing process, and after that point, only timely, significant issues will be considered.<sup>37</sup>

## A. Applicability of the Reopening Standards

Pilgrim Watch first argues that the Board erred in applying the standards for reopening the record in section 2.326.<sup>38</sup> Pilgrim Watch asserts that section 2.326 comes into play only when a litigant seeks to raise issues that already have been the subject of litigation before the board.<sup>39</sup> As Pilgrim Watch would have it, the reopening standards do not apply because its new contentions are unrelated to the two previously admitted contentions.<sup>40</sup> Moreover, Pilgrim Watch argues that, based on its reading of our decision in the *Vermont Yankee* license renewal proceeding, our remanding a portion of Contention 3 held this proceeding open to permit the

<sup>&</sup>lt;sup>33</sup> *Id*.

<sup>&</sup>lt;sup>34</sup> *Id.* § 2.337(a).

<sup>&</sup>lt;sup>35</sup> *Id.* § 2.326(b).

<sup>&</sup>lt;sup>36</sup> Oyster Creek, CLI-09-7, 69 NRC at 287.

<sup>&</sup>lt;sup>37</sup> See Final Rule, Criteria for Reopening Records in Formal Licensing Proceedings, 51 Fed. Reg. 19,535, 19,539 (May 30, 1986) ("The purpose of this rule is not to foreclose the raising of important . . . issues, but to ensure that, once a record has been closed and all timely-raised issues have been resolved, finality will attach to the hearing process.").

<sup>&</sup>lt;sup>38</sup> Petition at 7.

<sup>&</sup>lt;sup>39</sup> *Id.* at 9.

<sup>&</sup>lt;sup>40</sup> *Id*.

filing of "genuinely new" contentions during the pendency of the remand.<sup>41</sup> Therefore, Pilgrim Watch asserts, it need not move to reopen a proceeding that is open already.<sup>42</sup>

Contrary to Pilgrim Watch's assertions, the reopening standards in section 2.326 expressly contemplate contentions that raise issues not previously litigated. In particular, subsection (d) anticipates circumstances where the motion to open "relates to a contention not previously in controversy among the parties." In that circumstance, the movant must satisfy the balancing test in 10 C.F.R. § 2.309(c), in addition to the reopening standards.<sup>44</sup> Moreover,

<sup>&</sup>lt;sup>41</sup> See Pilgrim Watch's Petition for Review of Memorandum and Order (Denying Pilgrim Watch's Requests for Hearing on Certain New Contentions) ASLBP No. 06-848-02-LR, August 11, 2011 (Aug. 26, 2011), at 4 (August 26 Petition) (citing Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC 1, 10 n.37 (2010)); Petition at 8 (incorporating arguments from the August 26 Petition). We discourage incorporating pleadings or arguments by reference; we expect briefs on appeal to be "comprehensive, concise, and self-contained." Vogtle, CLI-11-8, 74 NRC at \_\_\_ (slip op. at 4). See also Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-9, 71 NRC 245, 278 n.205 (2010). As a practical matter, Pilgrim Watch's August 26 Petition also is currently before us; we consider its discussion concerning the applicability of the reopening standards.

<sup>&</sup>lt;sup>42</sup> Pilgrim Watch further argues that the National Environmental Policy Act (NEPA) supersedes our rules, such that we are not permitted to apply our reopening criteria when a litigant in an adjudicatory proceeding attempts to raise "new and significant information." Petition at 12, 22. The cases that Pilgrim Watch cites do not support this proposition. Federal courts leave to an agency's discretion the manner in which the agency determines whether information is new or significant to warrant supplementation of an environmental impact statement, including the application of its procedural rules. *See Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 373-77 (1989); *Union of Concerned Scientists v. NRC*, 920 F.2d 50, 55-56 (D.C. Cir. 1990). In any event, even assuming that the information Pilgrim Watch presents in its new contentions is truly new, Pilgrim Watch has not demonstrated the significance of the information to the environmental review in this proceeding, for the reasons discussed below.

<sup>&</sup>lt;sup>43</sup> 10 C.F.R. § 2.326(d).

<sup>&</sup>lt;sup>44</sup> *Id.*; *Millstone*, CLI-09-5, 69 NRC at 124. *See also N.J. Envtl. Fed'n v. NRC*, 645 F.3d 220, 232-33 (3d Cir. 2011) ("To accept . . . [the] argument that the motion to reopen standard may (continued. . .)

Pilgrim Watch misreads our decision in *Vermont Yankee*. Although we explained that the *proceeding* remained open during the pendency of a remand in that case, we made clear that the *record* remained closed and advised that any contentions raising "genuinely new" issues would have to be accompanied by a motion to reopen.<sup>45</sup> We further explained that once the *proceeding* closed, the mechanism to raise a new issue no longer would be a contention accompanied by a motion to reopen, but rather a request for action under 10 C.F.R. § 2.206 or a petition for rulemaking under 10 C.F.R. § 2.802.<sup>46</sup>

Vermont Yankee directly applies here. The Board closed the record in June 2008.

Although we remanded a portion of Contention 3 to the Board for hearing in March 2010, our remand expressly was limited to the contention at issue. As in Vermont Yankee, the remand held the proceeding open, but only for the limited purpose of litigating the remanded contention. Because Pilgrim Watch submitted its new contentions with the record already closed on all matters save Contention 3, Pilgrim Watch was obliged to address and satisfy the

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<sup>(...</sup>continued)

never be applied in situations where a petitioner seeks to add previously unlitigated material would effectively render the regulation meaningless.").

<sup>&</sup>lt;sup>45</sup> *Vermont Yankee*, CLI-10-17, 72 NRC at 10 n.37.

<sup>&</sup>lt;sup>46</sup> *Id*.

<sup>&</sup>lt;sup>47</sup> See *id*. See generally 10 C.F.R. § 2.318 (describing the commencement of a proceeding); *id*. § 2.1207 (describing the taking of evidence for the record in a Subpart L hearing); *id*. pt. 2, app. B.II ("Model Milestones—10 C.F.R. Part 2, Subpart L") (describing the schedule for Subpart L proceedings, including the closing of the record).

reopening standards in section 2.326. The Board unanimously found that the reopening standards apply in the circumstances presented here.<sup>48</sup>

Moreover, in CLI-11-5, we noted that "our procedural rules contain ample provisions through which litigants may seek admission of new or amended contentions, seek stays of licensing board decisions, appeal adverse decisions, and file motions to reopen the record, as appropriate." Therefore, we found that "[n]either new procedures nor a separate timetable for raising new issues related to the Fukushima events are . . . warranted." Since issuing CLI-11-5, we have continued to review the Fukushima events and have provided the Staff direction on an appropriate regulatory response that ultimately will be applied to all affected nuclear plants. We continue to believe that our procedural rules can be applied effectively to address proposed new or amended contentions related to the Fukushima events, and are aware of no new information that causes us to change our view.

<sup>&</sup>lt;sup>48</sup> See LBP-11-23, 74 NRC at \_\_\_ (slip op. at 7); *id.* at \_\_\_ (slip op., Judge Young Separate Statement at 1).

<sup>&</sup>lt;sup>49</sup> Union Electric Co. d/b/a Ameren Missouri (Callaway Plant, Unit 2), CLI-11-5, 74 NRC \_\_\_ (Sept. 9, 2011) (slip op. at 35). In addition to the tools available to raise Fukushima-related issues in litigation, we note that traditional non-litigation venues for public involvement such as petitions for rulemaking initiated under 10 C.F.R. § 2.802 and requests for action initiated under 10 C.F.R. § 2.206 remain available. We have also directed the Staff to engage with stakeholders regarding the appropriate regulatory response to the events at Fukushima. See, e.g., Staff Requirements—SECY-11-0093—Near-Term Report and Recommendations for Agency Actions Following the Events in Japan (Aug. 19, 2011) (ML112310021).

 $<sup>^{50}</sup>$  Callaway, CLI-11-5, 74 NRC at \_\_ (slip op. at 35).

<sup>&</sup>lt;sup>51</sup> Staff Requirements—SECY-11-0124—Recommended Actions to be Taken Without Delay from the Near-Term Task Force Report (Oct. 18, 2011) (ML112911571) (Staff Requirements—SECY-11-0124).

Based upon the above, in our view, the Board properly applied the reopening standards to these contentions.

We next address the Board's analysis of each contention below.

#### B. The Recriticality Contention

Pilgrim Watch asserts that data from the Tokyo Electric Power Company (TEPCO) indicated the presence of high levels of I-131, a radioactive isotope of iodine, weeks after the Fukushima Daiichi Nuclear Power Station was severely damaged as a result of the March 11, 2011, Great East Japan Earthquake and tsunami.<sup>52</sup> "The only apparent explanation" for the increased levels of I-131, Pilgrim Watch asserts, is that "at least one of the [scrammed] reactors ... is still critical." According to Pilgrim Watch, the reactors at Fukushima Daiichi and Pilgrim are similar in design, thus the purported recriticality at Fukushima Daiichi constitutes "new and signification information" that must be considered in Entergy's Environmental Report.<sup>54</sup> Pilgrim Watch notes that the current SAMA analysis considers a twenty-four-hour plume duration, and that the MACCS2 code used in the SAMA analysis is limited to a four-day plume duration.<sup>55</sup> Based on what it believes to be occurring at Fukushima Daiichi, Pilgrim Watch maintains that Entergy must revise its SAMA analysis to account for the possibility that criticality will continue

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<sup>&</sup>lt;sup>52</sup> Recriticality Contention at 1-2. The contention reads: "[t]he Environmental Report is inadequate post Fukushima Daiichi because Entergy's SAMA analysis ignores new and significant lessons learned regarding the possible off-site radiological and economic consequences in a severe accident." *Id.* at 1.

<sup>&</sup>lt;sup>53</sup> *Id.* at 13.

<sup>&</sup>lt;sup>54</sup> *Id.* at 1.

<sup>&</sup>lt;sup>55</sup> *Id.* at 1-3.

for weeks or months after a severe accident.<sup>56</sup> Pilgrim Watch argues that "[a]s releases extend into days, weeks[,] and even months, the offsite consequence[s] will be larger, and this will affect the [SAMA] cost-benefit analysis."<sup>57</sup> For support, Pilgrim Watch provides the "Statement of David Chanin," who represents that he has "read and reviewed the . . . proposed contention and fully support[s] all [of] its statements."<sup>58</sup>

The Board based its admissibility determination in large part on section 2.326(a)(1), which concerns the timeliness of the information underlying the contention.<sup>59</sup> It reasoned that definitive information on what occurred at Fukushima is not yet available, and characterized Pilgrim Watch's assumptions as "generalized."<sup>60</sup> The Board noted that studies published decades ago analyzed the potential for recriticality,<sup>61</sup> and found that the contention, in essence, challenged the inability of the MACCS2 code to model releases over a period longer than four days—a matter that Pilgrim Watch could have raised at the outset of this proceeding, in 2006.<sup>62</sup> Thus, the Board found that Pilgrim Watch had not satisfied section 2.326(a)(1) because the information underlying the Recriticality Contention was not timely raised.<sup>63</sup>

<sup>&</sup>lt;sup>56</sup> See *id.* at 7.

<sup>&</sup>lt;sup>57</sup> *Id*.

<sup>&</sup>lt;sup>58</sup> *Id.* at 20-21.

<sup>&</sup>lt;sup>59</sup> See LBP-11-23, 74 NRC at \_\_\_ (slip op. at 10-15).

<sup>&</sup>lt;sup>60</sup> *Id.* at (slip op. at 10).

<sup>&</sup>lt;sup>61</sup> *Id.* at (slip op. at 12).

<sup>&</sup>lt;sup>62</sup> See id. at \_\_\_ (slip op. at 11-12).

<sup>&</sup>lt;sup>63</sup> *Id.* at \_\_\_ (slip op. at 14). The Board further found that Pilgrim Watch had not raised an "exceptionally grave" issue, which would have overcome the contention's lateness, for the same (continued. . .)

With regard to the remaining reopening factors, the Board found that Pilgrim Watch had not demonstrated the existence of a significant safety or environmental issue, as required by section 2.326(a)(2), nor had it demonstrated the likelihood of a materially different result had the information been considered initially, as required by section 2.326(a)(3).<sup>64</sup> The Board determined that, at bottom, the Recriticality Contention suffered from a lack of support.<sup>65</sup> As the Board described it, the foundation of the contention was based on layers of speculation— speculation regarding recriticality at Fukushima, speculation regarding an increased probability of a longer term release, speculation that longer-term releases necessarily have greater offsite consequences, and speculation that if a longer term release were modeled in the SAMA analysis, additional cost-beneficial mitigation measures would be identified.<sup>66</sup> "Moreover," the Board reasoned, "Pilgrim Watch offer[ed] nothing to link the events at Fukushima to the Pilgrim plant other than the similarity of their designs." For reasons of lateness and lack of support, the Board also found that the contention did not meet the good cause requirement in 10 C.F.R.

(...continued)

reasons that the contention did not demonstrate a significant safety or environmental issue. *Id.* at (slip op. at 14-15).

<sup>&</sup>lt;sup>64</sup> See *id.* at \_\_\_ (slip op. at 15-18). See also *id.* at \_\_\_ (slip op., Judge Young Separate Statement at 1, 30) (finding that although the contention met the requirements in subsections 2.326(a)(1) and (a)(2), it did not "measure up" to the requirements in subsection 2.326(a)(3)).

<sup>&</sup>lt;sup>65</sup> See *id.* at \_\_\_ (slip op. at 15-18). In addition, the Board found the support referenced in the Recriticality Contention, including the Statement of David Chanin, insufficient to satisfy the section 2.326(b) affidavit requirements. *Id.* at \_\_\_ (slip op. at 17-18). *See also id.* at \_\_\_ (slip op., Judge Young Separate Statement at 30).

<sup>&</sup>lt;sup>66</sup> See id. at \_\_\_ (slip op. at 16).

<sup>&</sup>lt;sup>67</sup> *Id*.

§ 2.309(c)(1)(i), or the general contention admissibility requirements in 10 C.F.R. § 2.309(f)(1)(i) through (vi).<sup>68</sup>

In its petition for review, Pilgrim Watch asserts that the Board majority incorrectly concluded that its contention was late.<sup>69</sup> Following the reasoning in Judge Young's separate statement, Pilgrim Watch explains that although it references information that predates the March 11, 2011, earthquake and tsunami, it does so to provide context for the new information arising from the events at Fukushima Daiichi.<sup>70</sup> And arguing that its contention raises significant issues, Pilgrim Watch alternates between environmental and safety significance, arguing that "months of releases would be significant on some level," and that "it is difficult to believe" that inputs to the SAMA analysis would not change.<sup>71</sup>

All of the factors in section 2.326 must be met in order for a motion to reopen to be granted.<sup>72</sup> Here, there is some dispute regarding the timeliness of the information raised in the Recriticality Contention. We need not decide the timeliness issue, however, because the

<sup>&</sup>lt;sup>68</sup> See id. at \_\_\_ (slip op. at 21-25).

<sup>&</sup>lt;sup>69</sup> See Petition at 10.

<sup>&</sup>lt;sup>70</sup> See *id.* at 10-11. See also LBP-11-23, 74 NRC at \_\_ (slip op., Judge Young Separate Statement at 2-3).

<sup>&</sup>lt;sup>71</sup> Petition at 12 (quoting LBP-11-23, 74 NRC at \_\_\_ (slip op., Judge Young Separate Statement at 30)).

<sup>&</sup>lt;sup>72</sup> See 10 C.F.R. § 2.326(a) ("A motion to reopen a closed record to consider additional evidence will not be granted unless the . . . criteria [in subsections (1) through (3)] are satisfied."). Pilgrim Watch purposely did not address the reopening criteria, maintaining that reopening is not required. Failure to address the reopening criteria is enough to reject contentions that are filed after a record has closed. See *Vogtle*, CLI-11-8, 74 NRC at \_\_\_ (slip op. at 8-9); *Millstone*, CLI-09-5, 69 NRC at 124-25.

Recriticality Contention fails on an independent ground also cited by the Board—lack of adequate support. Pilgrim Watch does not demonstrate, with the level of support required under section 2.326(b), that a materially different result would have been likely had the possibility of recriticality over a period longer than twenty-four hours, or even four days, been considered in the SAMA analysis initially.<sup>73</sup>

As the Board points out, Pilgrim Watch focuses on what it perceives to be the reason for increased levels of I-131, asserting that the only possible explanation is that recriticality is occurring.<sup>74</sup> But Pilgrim Watch concedes that information from the events at Fukushima Daiichi continues to evolve, stating that it will continue to provide updates as it receives additional information.<sup>75</sup> Indeed, the pleadings in this case demonstrate the iterative nature of the information;<sup>76</sup> as time passes, assumptions about what happened at Fukushima Daiichi continue

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<sup>&</sup>lt;sup>73</sup> See 10 C.F.R. § 2.326(a)(3).

<sup>&</sup>lt;sup>74</sup> See Recriticality Contention at 3 (claiming that "[w]e know that criticality was continuing at Fukushima Unit 2 through April 27, 2011, and [for a] shorter duration at Unit 1, because of their continued post-scram high findings of I-131 reported by TEPCO"); *id.* at 13 (asserting that "[t]he only apparent explanation [for the reported I-131 levels] is that, after almost two months, at least one of the [scrammed] reactors . . . is still critical").

<sup>&</sup>lt;sup>75</sup> See id. at 14; Petition at 17 n.11.

<sup>&</sup>lt;sup>76</sup> See Pilgrim Watch Request for Leave to Supplement Pilgrim Watch Request for Hearing on a New Contention Regarding the Inadequacy of the Environmental Report, Post Fukushima filed June 1, 2011 (Aug. 8, 2011) (seeking to supplement the Direct Torus Vent contention to incorporate excerpts from the NRC's Near Term Task Force Report). See generally "Recommendations for Enhancing Reactor Safety in the 21<sup>st</sup> Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident" (July 12, 2011) (transmitted to the Commission via "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan," Commission Paper SECY-11-0093 (July 12, 2011) (ML11186A950) (package)) (Near-Term Report). Although Pilgrim Watch filed the motion to supplement the Direct Torus Vent Contention, it illustrates the evolution of the issues involved here.

to change. For example, based on affidavits attached to Entergy's answer to Pilgrim Watch's Recriticality Contention, Entergy asserts that "the evidence cited by Pilgrim Watch (the relatively higher observed levels of Iodine-131 . . .) is hardly conclusive that post-scram criticalities have occurred at any of the Fukushima reactors." Entergy offers explanations other than recriticality for the increased levels of I-131.

But even were we to assume that Pilgrim Watch's recriticality hypothesis is true, we still would find the support for Pilgrim Watch's Recriticality Contention lacking. As the Board observed, Pilgrim Watch made no attempt to link the events at Fukushima Daiichi, with sufficient support, to a material change in the Pilgrim SAMA analysis.<sup>79</sup> Other than generalized assertions that a longer release period will cause greater offsite consequences and subsequent changes in the SAMA analysis, Pilgrim Watch makes no attempt to indicate how the consequences would be greater than currently assumed, or what changes would occur.<sup>80</sup>

As Entergy points out, "[t]he duration of an accident release is not the controlling factor for a SAMA analysis."81 Rather, the "type and amount of radionuclides, the heat energy in the

<sup>79</sup> LBP-11-23, 74 NRC at \_\_\_ (slip op. at 16).

<sup>&</sup>lt;sup>77</sup> Entergy's Answer Opposing Pilgrim Watch Request for Hearing on Post-Fukushima SAMA Contention (June 6, 2011), at 17 (Entergy Answer to Recriticality Contention).

<sup>78</sup> See id.

<sup>&</sup>lt;sup>80</sup> See Petition at 9, 11-12 (hypothesizing that continuing criticality would be "significant on some level" (quoting LBP-11-23, 74 NRC at \_\_ (slip op., Judge Young Separate Statement at 30))); Recriticality Contention at 7 (asserting that "[a]s releases extend into days, weeks[,] and even months, the offsite consequence[s] will be larger, and this will affect the cost-benefit analysis"). We find that Pilgrim Watch has not demonstrated the existence of a "significant" issue, for the same reason. See 10 C.F.R. § 2.326(a)(2).

<sup>&</sup>lt;sup>81</sup> Entergy Answer to Recriticality Contention at 20.

plume associated with the release, the height of the release, the timing of the release, and the maximum plume duration considered," all factor into its evaluation of consequences. Entergy explains that although its SAMA analysis considers a single plume over a twenty-four-hour period, the source term used to represent the radioactive material released is greater than what has been released from Fukushima Daiichi Units 1, 2, and 3 combined. Thus, Entergy illustrates the possibility that releases over weeks or months might be cumulatively smaller than a large single release over a short duration. Pilgrim Watch offers nothing to contradict this analysis. Without more than Pilgrim Watch's conclusory statements, there is no basis to establish how the purported recriticality at Fukushima Daiichi would affect the Pilgrim SAMA analysis, therefore showing that a materially different result would have occurred had this information been considered initially. We find that the Board appropriately rejected the contention for failing to make the necessary link between the events at Fukushima Daiichi and

<sup>&</sup>lt;sup>82</sup> Id.

<sup>83</sup> See id. at 18-21; Entergy Answer at 18.

<sup>&</sup>lt;sup>84</sup> See Entergy Answer to Recriticality Contention at 18-21.

<sup>&</sup>lt;sup>85</sup> In its petition for review, Pilgrim Watch continues to assert that a longer release time will result in greater offsite consequences, with a resulting impact on the cost-benefit balance for the identified mitigation measures, still without support. See Petition at 9, 11-12.

<sup>&</sup>lt;sup>86</sup> See 10 C.F.R. § 2.326(a)(3). The Recriticality Contention fails on another, related ground—failure to meet the affidavit requirements in section 2.326(b). Pilgrim Watch's "Statement of David Chanin" does not address the reopening criteria, nor—more importantly—does it "set forth the factual and/or technical bases for the movant's claim that the criteria . . . have been satisfied." See id. § 2.326(b). Mr. Chanin's statement merely provides that he has "read and reviewed the . . . contention and fully support[s] all [of] its statements." Recriticality Contention at 21. Litigants seeking to reopen a record must "comply fully with [section] 2.326(b)." *Vogtle*, CLI-11-8, 74 NRC at \_\_\_ (slip op. at 9). We do not expect boards to search the pleadings for information that would satisfy our reopening requirements. *See id.* at (slip op. at 8-9).

the Pilgrim environmental review. Accordingly, we decline to disturb the Board's ruling on the Recriticality Contention.<sup>87</sup>

#### C. The Direct Torus Vent Contention

Like the Recriticality Contention, the Direct Torus Vent Contention also challenges

Entergy's SAMA analysis.<sup>88</sup> Pilgrim Watch asserts that vents designed to relieve containment

pressure did not function in Fukushima Daiichi Units 1, 2, and 3.<sup>89</sup> According to Pilgrim Watch,

operators were reluctant to release radiation outside of the plant by opening the vents, but when

operators later decided to operate the vents, they were unable to do so.<sup>90</sup> Pilgrim Watch argues

that Entergy now must account for an increased probability of vent failure and subsequent

containment failure, and asserts that Entergy must include a cost-benefit analysis of additional

mitigation measures, including radiation filters, additional vents, and additional backup power

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<sup>&</sup>lt;sup>87</sup> For both the Recriticality and the Direct Torus Vent Contentions, Pilgrim Watch argues, for the first time, that "Pilgrim's SAMA analysis underestimates the extent of core damage ([core damage frequency]) by an order of magnitude." Petition at 5. Pilgrim Watch cites the Thompson Report, which is attached to Massachusetts' new contention. *Id.* at 5 n.3 (citing Thompson Report at 17). (This is the subject of Massachusetts' stay request/alternative motion to strike. *See supra* note 23.) We do not consider arguments made for the first time on appeal. *See South Carolina Electric & Gas Co. and South Carolina Public Service Authority (also referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 5 n.20 (2010). In any event, Pilgrim Watch does not discuss how this change to the core damage frequency, assuming it is true, would alter the SAMA analysis.

<sup>&</sup>lt;sup>88</sup> Direct Torus Vent Contention at 1. The contention states: "[b]ased on new and significant information from Fukushima, the Environmental Report is inadequate post Fukushima Daiichi. Entergy's SAMA analysis ignores new and significant issues raised by Fukushima regarding the probability of both containment failure, and subsequent larger off-site consequences due to failure of the direct torus vent . . . to operate." *Id.* 

<sup>89</sup> Id. at 6.

<sup>&</sup>lt;sup>90</sup> *Id.* at 6, 11.

supply.<sup>91</sup> Pilgrim Watch also argues that piping for Pilgrim's direct torus vent system is underground and susceptible to corrosion, which could disable the vent.<sup>92</sup> The consideration of an increased probability of vent failure and subsequent containment failure, Pilgrim Watch maintains, will justify additional mitigation measures.<sup>93</sup> Pilgrim Watch concludes that "[t]he offsite consequences [of a severe accident], without addressing the deficiencies [noted in its contention], would far outweigh the cost of mitigation[] to reduce risk of containment failure."<sup>94</sup> As part of the support for its contention, Pilgrim Watch attaches the "Affidavit of Arnold Gundersen."<sup>95</sup>

For reasons similar to its rejection of the Recriticality Contention, the Board rejected Pilgrim Watch's Direct Torus Vent Contention. The Board determined that Pilgrim Watch had not met any of the three reopening requirements, finding that the information on which the contention was based already had been analyzed in Entergy's license renewal application or concerned "issues that have been widely recognized for many years." The Board again observed that Pilgrim Watch's contention was based on speculation, with "nothing to link either the asserted failure of the Fukushima [direct torus vents] to operate . . . [with] what might

<sup>&</sup>lt;sup>91</sup> See id. at 2, 9, 13, 17 & n.17, 20.

<sup>&</sup>lt;sup>92</sup> *Id.* at 20-21.

<sup>&</sup>lt;sup>93</sup> *Id.* at 5.

<sup>&</sup>lt;sup>94</sup> *Id.* at 29.

<sup>95</sup> See id. at 33-34.

<sup>&</sup>lt;sup>96</sup> See LBP-11-23, 74 NRC at \_\_\_ (slip op. at 32).

<sup>&</sup>lt;sup>97</sup> See id.

reasonably be expected of the [direct torus vents] at Pilgrim," and nothing "to support [Pilgrim Watch's] implication that adding this possibility would alter the probability [of direct torus vent] failure and thereby materially alter the SAMA cost-benefit analysis." For the same reasons, the Board also found that Pilgrim Watch had not met the timeliness and contention admissibility requirements of subsections 2.309(c)(1) and 2.309(f)(1).

Pilgrim Watch contends that the Board erred in finding the Direct Torus Vent Contention late. According to Pilgrim Watch, Entergy's SAMA analysis "clearly assumed that the [direct torus vent] would work, and that theoretical assumption was the underpinning of its assumed probabilities in accident sequences." In other words, Pilgrim Watch argues, the experience at Fukushima is a "real-world test" of what was known only "theoretically" before, thus making it new and significant information that must now be considered in the SAMA analysis. Arguing that the Board incorrectly found that Pilgrim Watch had not established an environmentally significant issue, Pilgrim Watch generally references the safety significance of containment failure. In addition, Pilgrim Watch faults the Board for not finding in its favor on the "materially different result" prong of the reopening standards, arguing that it "knows for certain that Pilgrim's SAMA analysis underestimated, by a large order of magnitude, probable releases in a severe

<sup>&</sup>lt;sup>98</sup> *Id.* The Board also found fault with the Gundersen Affidavit, finding it insufficient to satisfy the requirements of section 2.326(b). *Id.* at \_\_\_ (slip op. at 34).

<sup>&</sup>lt;sup>99</sup> See id. at \_\_\_ (slip op. at 34-38).

<sup>&</sup>lt;sup>100</sup> See Petition at 13-17.

<sup>&</sup>lt;sup>101</sup> *Id.* at 14.

<sup>&</sup>lt;sup>102</sup> *Id.* at 15 (citing LBP-11-23, 74 NRC at \_\_\_ (slip op., Judge Young Separate Statement at 2)).

<sup>&</sup>lt;sup>103</sup> See *id.* at 17-19.

accident based on real experience."<sup>104</sup> Pilgrim Watch maintains that consideration of an increased probability of vent failure and subsequent containment failure will change the SAMA analysis and possibly lead to delay of license issuance until the problems raised in this and the Recriticality Contention have been fixed.<sup>105</sup>

As is the case with the Recriticality Contention, we need not address the timeliness of the information raised in the Direct Torus Vent Contention. The Direct Torus Vent Contention fails on an independent ground. We agree with the Board that Pilgrim Watch has not demonstrated, with the level of support required by our rules, that a materially different result would have been likely had the contention been considered initially, as required by section 2.326(a)(3).

Pilgrim Watch provides nothing to back up its generalized claims that the SAMA analysis underestimates the consequences of a severe accident "by a large order of magnitude," nor does Pilgrim Watch offer any detail as to how an unspecified increase in consequences would lead to the identification of additional cost-beneficial mitigation measures. Although Pilgrim Watch asserts in its petition that Entergy "clearly assumed" that the direct torus vent would work, Pilgrim Watch is, on this point, simply incorrect. As Entergy notes in its answer, the SAMA analysis "explicitly analyzes all of the issues that Pilgrim Watch claims are significant from Fukushima regarding [this] contention (i.e., pressure buildup, operator error and [direct torus vent] failure, hydrogen explosions, containment breach, and large radioactive

<sup>&</sup>lt;sup>104</sup> *Id.* at 20.

<sup>&</sup>lt;sup>105</sup> *Id.* at 19.

<sup>&</sup>lt;sup>106</sup> See LBP-11-23, 74 NRC at \_\_\_ (slip op. at 31-38).

releases)."<sup>107</sup> In its Direct Torus Vent Contention, Pilgrim Watch acknowledged that Entergy's SAMA analysis considered the possibility of an operator's failure to open the direct torus vent, but asserted that Entergy now must consider an operator's affirmative decision not to open the vent. <sup>108</sup> But Pilgrim Watch does not explain how an operator's failure to open the vent is any different from a decision not to open it. The result in either case is a closed vent, a possibility that Entergy already has included in the SAMA analysis. <sup>109</sup> In our view, the Board appropriately rejected the contention because Pilgrim Watch does not show the likelihood of a material change to the SAMA analysis, particularly where Entergy already has considered the issues raised in the contention. <sup>110</sup>

Pilgrim Watch's remaining claims amount to unsupported assertions that Fukushima provides different information, that the probability of vent failure has increased, and that the SAMA analysis, when considering these facts, is "certain" to change. However, such bare

<sup>&</sup>lt;sup>107</sup> Entergy Answer at 18.

<sup>&</sup>lt;sup>108</sup> See Direct Torus Vent Contention at 23.

<sup>&</sup>lt;sup>109</sup> See Entergy Answer at 18. Pilgrim Watch also argues that Entergy must consider vent failure due to other contributors, including corrosion in the buried pipes that make up the direct torus vent system, lack of vent filters, lack of redundant battery power, and lack of redundant vents. See Direct Torus Vent Contention at 9, 13, 17 & n.17, 20-21. But again, Pilgrim Watch does not confront the existing SAMA analysis.

<sup>&</sup>lt;sup>110</sup> For the same reason, Pilgrim Watch has not demonstrated the existence of a "significant" issue, as required by 10 C.F.R. § 2.326(a)(2).

<sup>&</sup>lt;sup>111</sup> Pilgrim Watch claims that the SAMA analysis now must consider additional mitigation measures like vent filters, additional vents, and additional vent backup power, but fails to approximate the relative costs and benefits of these proposed measures. *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 11-12 (2002) ("[W]hether a SAMA . . . is worthy of more detailed analysis in an Environmental Report or SEIS hinges upon whether it may be cost-beneficial to implement (continued. . .)

assertions are insufficient to demonstrate a genuine dispute on a material issue of law or fact under our general contention admissibility requirements in section 2.309(f)(1)(vi), let alone a motion to reopen under section 2.326, which sets a higher evidentiary standard. We therefore decline to disturb the Board's ruling on the Direct Torus Vent Contention. 113

(...continued)

<sup>. . . .</sup> It would be unreasonable to trigger full adjudicatory proceedings based merely upon a suggested SAMA under circumstances in which the Petitioners have done nothing to indicate the approximate relative cost and benefit of the SAMA."). At most, referencing the existing analysis in Entergy's Environmental Report, Pilgrim Watch generally asserts that the cost of a filter is \$3,000,000, without approximating the corresponding benefits of a filtered vent. See Direct Torus Vent Contention at 17, 32. And Pilgrim Watch vaguely asserts that "more SAMAs (such as [direct torus vent] filters and redundant vent lines) are likely to be justified and the risk for the public will be reduced significantly" if Entergy revises its SAMA analysis. *Id.* at 22. See also id. at 30 (asserting that "the 'fixes' [Pilgrim Watch] recommend[s] would be cost effective"). These statements fall short of the support required both by 10 C.F.R. §§ 2.309(f)(1)(v) and 2.326. See generally FSEIS at G-25 (explaining that in response to requests for additional information from the Staff, Entergy revised the cost-benefit estimates for filtered vents, which then satisfied the Staff's concerns).

<sup>&</sup>lt;sup>112</sup> See 10 C.F.R. § 2.326(b). In a related vein, similar to the Recriticality Contention, the Direct Torus Vent Contention fails because the "Affidavit of Arnold Gundersen" does not "comply fully" with section 2.326(b). See id.; Vogtle, CLI-11-8, 74 NRC at \_\_\_ (slip op. at 9). Mr. Gundersen states that he supports the content of Pilgrim Watch's request, and concludes, without explanation, that "[t]he explosions at Fukushima show that Pilgrim's [direct torus vent] is unlikely to save Pilgrim's containment and huge amounts of radiation will be released. The subsequent offsite costs incurred from such an event justify additional mitigations to reduce the risk of [vent] failure and loss of containment." Direct Torus Vent Contention at 34. These statements are insufficient to meet the section 2.326(b) requirement that the affidavit "set forth the factual and/or technical bases for the movant's claim that the [reopening criteria] have been satisfied."

pilgrim Watch recently requested to supplement its petition based on a December 9, 2011 report issued by Congressman Edward Markey. *Pilgrim Watch's Request to Supplement Petition for Review of Memorandum and Order (Denying Pilgrim Watch's Requests for Hearing on Certain New Contentions) ASLBP No. 06-848-02-LR, August 11, 2011 (Filed August 26, 2011) and Pilgrim Watch's Petition for Review of Memorandum and Order (Denying Pilgrim Watch's Requests for Hearing on New Contentions Relating to Fukushima Accident) Sept. 8, 2011 (Filed September 23, 2011) (Dec. 12, 2011). Entergy and the Staff oppose Pilgrim Watch's request. <i>Entergy's Answer Opposing Pilgrim Watch's Request to Supplement Petitions for Review* (Dec. 22, 2011); *NRC Staff's Answer to Pilgrim Watch's Request to Supplement Petition for Review of LBP-11-20 and LBP-11-23* (Dec. 22, 2011). Pilgrim Watch seeks leave to (continued. . .)

## D. Judge Young's Recommendation

As discussed above, Pilgrim Watch has not made a sufficient case to litigate its two contentions in this adjudication; for those reasons, we decline to direct the Board to further address them in this adjudication. We otherwise decline to take up Judge Young's recommendation and exercise our supervisory authority to direct the Staff to consider separately the issues raised by Pilgrim Watch's contentions prior to any decision on the license renewal application. We have considered expressly the question whether our Fukushima lessons-learned review must be completed prior to a decision on any pending license renewal application, and have concluded that any rule or policy changes we may make as a result of our post-Fukushima review may be made irrespective of whether a license renewal application is pending, or has been granted. Particularly with respect to license renewal, we observed that our ongoing regulatory and oversight processes provide reasonable assurance that each plant continues to comply with its "current licensing basis,' which can be adjusted by future

<sup>(...</sup>continued)

reply to Entergy's and the Staff's answers. *Pilgrim Watch Reply to Entergy's and NRC Staff's December 22, 2011 Answers Opposing Pilgrim Watch's Request to Supplement Petitions for Review of LBP-11-20 and LBP-11-23* (Dec. 29, 2011). Entergy filed an answer in opposition; Pilgrim Watch also seeks leave to reply to that answer. *Entergy's Answer Opposing Pilgrim Watch's Motion to File a Reply to Entergy's and NRC Staff's Answers* (Jan. 9, 2012); *Pilgrim Watch Reply to Entergy's Answer Opposing Pilgrim Watch's Motion to File a Reply to Entergy's and NRC Staff's Answers* (Jan. 14, 2012). We do not consider Pilgrim Watch's replies because Pilgrim Watch has not shown compelling circumstances. *See* 10 C.F.R. § 2.323(c). And Pilgrim Watch has not explained how the Markey Report—which relates to internal NRC governance—supports its contentions; we deny its request. On February 15, 2012, Pilgrim Watch again requested to supplement its petition, this time based on an Associated Press article. *Supplement to Pilgrim Watch Petitions for Review of LBP-12-01, LBP-11-23* (Feb. 15, 2012). Again, Pilgrim Watch fails to explain how this article, which concerns public access to a report detailing a possible "worst-case scenario" at Fukushima Dai-ichi, supports, or even relates to, its contentions. Accordingly, we also deny this request.

<sup>&</sup>lt;sup>114</sup> See LBP-11-23, 74 NRC at \_\_\_ (slip op., Judge Young Separate Statement at 54-55).

Commission order or by modification to the facility's operating license outside the renewal proceeding." <sup>115</sup>

Outside of this proceeding, our review of the events at the Fukushima Daiichi Nuclear Power Station is ongoing; that review includes not only a number of generic issues, but also certain "issues arising out of the Fukushima Daiichi accident that relate particularly to Mark I BWRs [Boiling Water Reactors]."<sup>116</sup> Recently, we approved the Staff's recommended actions to be taken without delay from the Near-Term Task Force.<sup>117</sup> Although we have made, and continue to make, significant progress in identifying and implementing lessons learned and prioritizing regulatory actions, the NRC continues to analyze the Fukushima events, to engage stakeholders, and to develop further recommendations.<sup>118</sup> We have in place well-established

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<sup>&</sup>lt;sup>115</sup> Callaway, CLI-11-5, 74 NRC at \_\_\_ (slip op. at 26) (citing Final Rule, Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,949, 64,953-54 (Dec. 13, 1991)). The Board issued LBP-11-23 one day before our decision in CLI-11-5.

<sup>&</sup>lt;sup>116</sup> *Id.* at \_\_\_ (slip op. at 54). The Near-Term Report addresses a number of issues not specific to Mark I BWRs, but also addresses reliable hardened vents, an issue specific to Mark I and II BWRs, at section 4.2.2. *See* Near-Term Report at 39-41.

<sup>&</sup>lt;sup>117</sup> See Staff Requirements—SECY-11-0124. See generally "Recommended Actions to Be Taken Without Delay from the Near-Term Task Force Report," Commission Paper SECY-11-0124 (Sept. 9, 2011) (ML11245A127, ML11245A144) (paper and attachment); Staff Requirements—SECY-11-0137—Prioritization of Recommended Actions to Be Taken in Response to Fukushima Lessons Learned (Dec. 15, 2011) (ML113490055) (Prioritization of Recommended Actions to Be Taken in Response to Fukushima Lessons Learned," Commission Paper SECY-11-0137 (Oct. 3, 2011) (ML11272A111) (package) (Prioritization of Recommended Actions, SECY-11-0137).

These efforts include the engagement of internal and external stakeholders. See Staff Requirements—COMWDM-11-0001/COMWCO-11-0001—Engagement of Stakeholders Regarding the Events in Japan (Aug. 22, 2011) (ML112340693). For example, the Staff's prioritization of Near-Term Task Force recommended actions included a discussion of additional recommendations for "further consideration and potential prioritization" that stakeholders, as well as the Staff, have identified. See Prioritization of Recommended Actions, SECY-11-0137, (continued. . .)

regulatory processes by which to impose any new requirements or other enhancements that may be needed following completion of regulatory actions associated with the Fukushima events. All affected nuclear plants ultimately will be required to comply with NRC direction resulting from lessons learned from the Fukushima accident, regardless of the timing of issuance of the affected licenses.

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<sup>(...</sup>continued)

at 4-5. See also Prioritization of Recommended Actions, SRM, at 2. (Although the Staff included "[f]iltration of containment vents"—one of the SAMAs that Pilgrim Watch proposes in its Direct Torus Vent Contention—as an item for further consideration and potential prioritization, the Staff noted that its "assessment of these issues is incomplete at this time." Prioritization of Recommended Actions, SECY-11-0137, at 5. We acted on the Staff's recommendation and provided direction regarding "the analysis and interaction with stakeholders needed to inform a decision" on the filtered vents issue. Prioritization of Recommended Actions, SRM, at 2.)

<sup>&</sup>lt;sup>119</sup> See Callaway, CLI-11-5, 74 NRC at \_\_\_ (slip op. at 24-25, 29).

## III. CONCLUSION

Pilgrim Watch asserts that the events at Fukushima Daiichi shed new light on the evaluation of alternatives to mitigate severe accidents in Entergy's Environmental Report.

Ultimately, however, Pilgrim Watch fails to demonstrate, with sufficient support, the implication of the Fukushima events on the existing environmental mitigation analysis for the Pilgrim Nuclear Power Station. As discussed above, we *deny* Pilgrim Watch's petition for review.

IT IS SO ORDERED.<sup>120</sup>

For the Commission

[SEAL] /RA/

Annette L. Vietti-Cook Secretary of the Commission

Dated at Rockville, Maryland, this <u>22<sup>nd</sup></u> day of February, 2012.

<sup>&</sup>lt;sup>120</sup> Commissioner Apostolakis did not participate in this matter.

## Chairman Gregory B. Jaczko, Dissenting

I dissent from the majority decision, upholding the Board's application of the standard reserved for reopening a closed hearing record, in 10 C.F.R. § 2.326(a), to Pilgrim Watch's Fukushima contentions. Fundamentally, I believe that the reopening standard is not appropriate for Fukushima related contentions. Therefore, I believe the admissibility of these contentions should have been considered solely under the criteria applicable to nontimely filings in 10 C.F.R. § 2.309(c). As the majority observes, the higher threshold for contention admissibility imposed for reopening a record places a heavy burden on a litigant seeking the admission of new contentions. In my view, this more stringent contention admissibility standard is not appropriate for contentions arising from the unprecedented and catastrophic accident at Fukushima.

We are in the process of conducting a comprehensive review of the Fukushima events from which we have, and will continue to, learn new information and gain new insights on the safety of our nuclear fleet. Given the significance of that accident and the potential implications for the safety of our nuclear reactors, we should allow members of the public to obtain hearings on new contentions on emerging information if they satisfy our ordinary contention standards. Applying more stringent admissibility standards to Fukushima contentions because a Board has taken the administrative action of closing the record on an unrelated hearing will lead to inconsistent outcomes and, more importantly, unfairly limit public participation in these important safety matters. When we considered whether our modifications to our adjudicatory processes should be modified for Fukushima-related contentions, we said we would monitor our

proceedings and issue additional guidance as appropriate.<sup>1</sup> I believe that we should do so now and direct that the reopening criteria should not be applied.

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<sup>&</sup>lt;sup>1</sup> Callaway, CLI-11-5, 74 NRC at \_\_\_ (slip op. at 36).

## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
ENTERGY NUCLEAR GENERATION CO. AND	)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket No. 50-293-LR
(Pilgrim Nuclear Power Station)	)	

## **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing **COMMISSION MEMORANDUM AND ORDER** (**CLI-12-03**) have been served upon the following persons by Electronic Information Exchange (EIE) and by electronic mail as indicated by an asterisk\*.

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 Docket No. 50-293-LR

#### **COMMISSION MEMORANDUM AND ORDER (CLI-12-03)**

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# Docket No. 50-293-LR 3 COMMISSION MEMORANDUM AND ORDER (CLI-12-03)

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[Original signed by Nancy Greathead]

Office of the Secretary of the Commission

Dated at Rockville, Maryland this 22<sup>nd</sup> day of February 2012