

June 27, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
Entergy Nuclear Generation Co., and) Docket No. 50-293-LR
Entergy Nuclear Operations, Inc.)
(Pilgrim Nuclear Power Station)) ASLBP No. 06-848-02-LR

NRC STAFF'S ANSWER IN OPPOSITION TO PILGRIM WATCH'S
REQUEST FOR HEARING ON A NEW CONTENTION REGARDING
INADEQUACY OF ENVIRONMENTAL REPORT, POST FUKUSHIMA

Pursuant to 10 C.F.R. § 2.309(h)(1), the staff of the Nuclear Regulatory Commission (“Staff”) hereby files its answer opposing the June 1, 2011 Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (“New Contention”).¹ The contention claims that the Pilgrim severe accident mitigation alternatives (“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 (DTV) to operate.” New Contention at 1. The contention should

¹ Pilgrim Watch Request for Hearing on a New Contention Regarding Inadequacy of Environmental Report, Post Fukushima (June 1, 2011) (Agencywide Document Access and Management System (“ADAMS”) Accession No. ML111530448) (“New Contention”). The relevant procedural history in this matter is described in NRC Staff’s Answer in Opposition to Commonwealth of Massachusetts Motion to Hold Licensing Decision in Abeyance Pending Commission Decision Whether to Suspend the Pilgrim Proceeding to Review the Lessons of the Fukushima Accident (May 12, 2011) (ADAMS Accession No. ML111320669) and NRC Staff’s Answer in Opposition to Commonwealth of Massachusetts’ Conditional Motion to Suspend Pilgrim Nuclear Power Plant License Renewal Proceeding Pending Resolution of Petition for Rulemaking to Rescind Spend Fuel Pool Exclusion Regulations (June 13, 2011) (ADAMS Accession No. ML111640493). Rather than needlessly repeat those descriptions, the Staff hereby incorporates both by reference.

not be admitted because Pilgrim Watch (“PW”) has not met the requirements for reopening a closed record: the New Contention is not based on evidence that would be likely to change the outcome in this case, is not timely, does not address a significant safety issue, and is not accompanied by an affidavit from an expert in the field of study at issue. In addition, Pilgrim Watch has not demonstrated that the contention is material or supported by an adequate factual basis. Thus, it also fails to meet the admissibility requirements applicable to all contentions.

DISCUSSION

I. Pilgrim Watch Fails to Meet the Requirements for Reopening the Record

A. Pilgrim Watch’s New Contention Must Meet the Requirements for Reopening the Record

The evidentiary record in this case has been closed since 2008. See Memorandum and Order (Ruling on Pilgrim Watch Motions Regarding Testimony and Proposed Additional Evidence Relating to Pilgrim Watch Contention 1) (June 4, 2008) (ADAMS Accession No. ML081560375) (“we consider that the record with regard to Contention 1 is effectively closed, and to the extent necessary we here and now formally so close it”); *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-08-09, 67 NRC 353, 356 (2008) (“we direct the Board to close the evidentiary record on Pilgrim Watch Contention 1”). Consequently, Pilgrim Watch’s New Contention must meet the requirements for reopening a closed record under 10 C.F.R. § 2.326.

Nonetheless, Pilgrim Watch argues that the requirements of § 2.326 do not apply to the New Contention because it “does not seek to introduce any new evidence as to Contention 1; rather it seeks to add a new, in scope, contention to the proceeding.” New Contention at 30. But, the text of § 2.326 plainly contradicts Pilgrim Watch’s claim. Subsections (a) through (c) of that regulation state all of the requirements that a motion to reopen must meet. Subsection (d) adds, “A motion to reopen which relates to a contention not previously in controversy among the

parties must *also* satisfy the requirements for nontimely contentions in § 2.309(c).” 10 C.F.R. § 2.326(d) (emphasis added). Contrary to Pilgrim Watch’s assertions, the obvious language of 10 C.F.R. § 2.326(d) indicates that a new contention must meet the requirements to reopen as well as the standard in § 2.309(c). Likewise, in the Vermont Yankee license renewal proceeding, the Commission observed that while a contention was on remand, intervenors were “free to submit a motion to reopen the record pursuant to 10 C.F.R. § 2.326, should they seek to address any *genuinely new* issues related to the license renewal application.” *Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-10-17, 72 NRC __ (Jul. 8, 2010) (slip op. at 10 n.37) (ADAMS Accession No. ML101890775); *see also New Jersey Environmental Federation v. NRC*, No. 09-2567, slip op. at 28 (3d Cir. May 18, 2011) (“Thus, the regulations explicitly allow for contentions alleging previously non-litigated issues to be raised through a motion to reopen.”). Consequently, the Commission’s regulations and case law clearly indicate that once the record closes, a party seeking to litigate a genuinely new issue must meet the requirements for reopening the record in 10 C.F.R. § 2.326.

Pilgrim Watch also claims that the “third criteria [in 10 C.F.R. § 2.326(a)] – that a materially different result would be likely – simply would show why Rule [2.326] does not apply; the new contention does not involve any prior result.” New Contention at 30. But, Pilgrim Watch’s contention attacks the SAMA analysis. *Id.* at 3, 5, 9, 12-13, 17, 21-23. The Commission has noted that the purpose of the SAMA analysis is to determine whether any proposed SAMAs would be “cost-effective to implement.” *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC __ (Mar. 26, 2010) (slip op. at 3) (ADAMS Accession No. ML100880136). Pilgrim Watch asserts that had the SAMA analysis evaluated the issues raised by the New Contention, “more SAMAs (such as DTV filters and redundant vent lines) are likely to be justified.” New Contention at 22.

Consequently, the New Contention challenges a prior result in this proceeding: the Staff's conclusions on which SAMAs would be cost-beneficial. NUREG-1437, Supplement 29, Vol. 2, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Regarding Pilgrim Nuclear Power Station, at G-45 (Jul. 2007) (ADAMS Accession No. ML071990027) ("FSEIS"). Therefore, Pilgrim Watch has not shown any reason why 10 C.F.R. § 2.326 would be inapplicable to the New Contention. Rather, the plain language of that section indicates that it applies to challenges that raise new issues, such as the New Contention, after the record has closed.

B. Standards for Reopening the Record

Pursuant to 10 C.F.R. § 2.326(a), a motion or petition to reopen a closed record to consider additional evidence will not be granted unless all of the criteria in 10 C.F.R. § 2.326 are satisfied. The motion to reopen must be timely, address a significant safety or environmental issue, and it must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered in the first instance. 10 C.F.R. § 2.326(a)(1)-(3); *AmerGen Energy Co., LLC.* (Oyster Creek Nuclear Generating Station), CLI-08-28, 68 NRC 658, 673 (2008). One or more affidavits that show the motion to reopen meets the above criteria must accompany the motion under 10 C.F.R. § 2.326(b). Each affidavit must contain statements from "competent individuals with knowledge of the facts alleged" or experts in disciplines appropriate to the issues raised. 10 C.F.R. § 2.326(b). See also *AmerGen Energy Co., LLC.* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 286 - 291 (2009). Moreover, "the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition." *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-05-12, 61 NRC 345, 350 (2005). The Commission has previously held, "The burden of satisfying the reopening requirements is a heavy one, and proponents of a reopening motion bear the burden of meeting all of [these] requirements."

Oyster Creek, CLI-09-7, 69 NRC at 287 (citations omitted, alteration in original). Thus, “Bare assertions and speculation … do not supply the requisite support[, and a] mere showing of a possible violation is not enough.” *Id.* (citations omitted, first alteration in original).

As discussed above, when a motion to reopen raises an issue not previously in controversy, the underlying contention must meet the requirements for nontimely contentions at 10 C.F.R. § 2.309(c). 10 C.F.R. § 2.326(d). Foremost among the requirements for admission of nontimely contentions is good cause for the failure to file on time. 10 C.F.R. § 2.309(c)(1)(i).

Finally, Pilgrim Watch’s New Contention must meet the general admissibility requirements in 10 C.F.R. § 2.309(f) that are applicable to all contentions; *inter alia*, it must have a legal and factual basis, must be supported by expert analysis and must raise a material issue.²

C. Pilgrim Watch has Not Shown that a Materially Different Result Would Be Likely if the Board Considered the New Contention

Under 10 C.F.R. § 2.326(a)(3), a motion to reopen a closed record “must demonstrate that a materially different result would be or would have been *likely* had the newly proffered evidence been considered initially.” 10 C.F.R. § 2.326(a)(3) (emphasis added). One board has explained that under this standard “[t]he movant must show that it is *likely* that the result would have been materially different, *i.e.*, that it is more probable than not that [the movant] would have prevailed on the merits of the proposed new contention.” *Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station),

² The Staff discussed reopening and contention admissibility at length in NRC Staff’s Answer in Opposition to Pilgrim Watch Request for Hearing on New Contention (January 7, 2011) (ADAMS Accession No. ML110070837) and NRC Staff’s Answer in Opposition to Pilgrim Watch’s January 20, 2011 Amended Contention (February 14, 2011) (ADAMS Accession No. ML110450664) and hereby incorporates those discussions and argument by reference.

LBP-10-19, 72 NRC __ (Oct. 28, 2010) (slip op. at 26) (ADAMS Accession No. ML103010136) .

The Commission has found a claim that simply states that new information “contradicts some of the Board’s factual findings, and then states that this prong of the reopening test is met . . . falls far short of meeting” § 2.326(a)(3)’s requirements. *Oyster Creek*, CLI-09-7, 69 NRC at 290-91 (internal quotations omitted).

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.” *Pilgrim*, CLI-10-11, 71 NRC __ (slip op. at 39). Consequently, to prevail on its new SAMA contention, Pilgrim Watch must demonstrate that the information its New Contention cites will likely result in identifying at least one more cost-beneficial SAMA. *Id.* In previously filed testimony, the NRC Staff has noted that “it would require at least a doubling of benefits before the next SAMA on the candidate list could become potentially cost-beneficial (hence at a minimum a doubling of benefits is required to change the results of the SAMA analysis).”³ Therefore, to reopen the record under 10 C.F.R. § 2.326(a), Pilgrim Watch must demonstrate that the issues raised by the New Contention would likely change the cost-benefit conclusions in the Pilgrim SAMA analysis by at least a factor of 2.

³ Affidavit of Dr. Nathan E. Bixler and Dr. S. Tina Ghosh in Support of the NRC Staff’s Answer in Opposition to Pilgrim Watch’s Request for Hearing on Post Fukushima SAMA Contention, at 4 (June 6, 2011) (ADAMS Accession No. ML111570502) (“Bixler and Ghosh Affidavit”) (Attachment).

Pilgrim Watch argues that “Entergy did not properly factor either reasonable probabilities of DTV failure, or the likely cost of failure, into its SAMA. Had Entergy done so, more SAMAs (such as DTV filters and redundant vent lines) are likely to be justified and the risk for the public will be reduced significantly.” New Contention at 22. More specifically, Pilgrim Watch claims that the SAMA analysis considers adding a filtered vent and determined that the cost would be \$3,000,000 and the benefit would be \$0.00.⁴ *Id.* at 17. Pilgrim Watch assumes “the estimated cost is approximately correct” but believes “\$0.00 added benefit is ludicrous.” *Id.* Thus, Pilgrim Watch asserts that “[t]he offsite consequences, without addressing the deficiencies cited in the foregoing, would far outweigh the cost of mitigations to reduce risk of containment failure.” *Id.* at 29.

However, Pilgrim Watch has not produced sufficient evidence to demonstrate that the concerns raised by the New Contention would likely alter the conclusions in the SAMA analysis. Pilgrim Watch generally asserts that additional SAMAs “are likely to be justified,” that some benefit estimates are “ludicrous,” and that in light of new information some benefits “would far outweigh” the costs of implementation. *Id.* at 22, 17, 29. But, Pilgrim Watch has not attempted to show that its claims would change the actual cost-benefit calculation on any given SAMA. Moreover, Pilgrim Watch has not produced any evidence that demonstrates such a change would be likely. Certainly, Pilgrim Watch has not shown that its claims would likely double the value of any benefit, the necessary increase to change the conclusions in the SAMA analysis.

⁴ While the SAMA analysis found that the installation of a filtered vent would result in no reduction to the plant core damage frequency, the analysis also concluded that it would reduce population dose by 18%. FSEIS at G-28. Therefore, contrary to Pilgrim Watch’s assertions, the SAMA analysis concluded that the filtered vent would result in a benefit ranging from \$872,000 to \$1,220,000, depending on the discount rate. *Id.* Pilgrim Watch has made no effort to dispute these numbers. As a result, Pilgrim Watch’s pleading cannot meet the Commission’s high standards for reopening. *Pacific Gas and Electric Company* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1366 (1984).

Rather, Pilgrim Watch vaguely alleges that some additional SAMAs “are likely to be justified.”

Id. Such “bare assertions” do not meet the Commission’s high standard for reopening the record. *Oyster Creek*, CLI-09-7, 69 NRC at 287. Rather, they are more akin to the cursory analyses the Commission has previously rejected under 10 C.F.R. § 2.326(a)(3). *Id.* at 290-91; *Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-11-02, 73 NRC __ (Mar. 10, 2011) (slip op. at 16-18)(ADAMS Accession No. ML110691312).⁵

D. Pilgrim Watch Has Not Shown Good Cause for Its Failure to File on Time

A contention filed in conjunction with a motion to reopen that raises an issue not previously in controversy must meet the requirements at 10 C.F.R. § 2.309(c). 10 C.F.R. § 2.326(d). Those requirements govern the admissibility of nontimely contentions. The most important of these requirements is good cause for failure to file on time. *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-15, 44 NRC 8, 24 (1996). Likewise, as stated above, a motion to reopen the record must be timely. 10 C.F.R. § 2.309(a)(1). The Commission has stated,

NRC contention admissibility and timeliness requirements demand a level of discipline and preparedness on the part of petitioners. But there would be no end to NRC licensing proceedings if petitioners could disregard our timeliness requirements every time they realize[d] . . . that maybe there was something after

⁵ Pilgrim Watch also claims that pursuant to NUREG-0386, Digest 15, United States Nuclear Regulatory Commission Staff Practice and Procedure Digest: Commission, Appeal Board, and Licensing Board Decisions – July 1972 – August 2009, at Post Hearing Matters 11-12 (Mar. 2010) (ADAMS Accession No. ML101000014), the Board may reopen the record *sua sponte* to reach a significant issue. But, that document clearly states, “Persons using this Digest are placed on notice that it may not be used as an authoritative citation in support of any positions before the Commission or any of its adjudicatory tribunals.” *Id.* at ii. Moreover, the cases cited in that passage significantly predate the NRC’s codification and refinement of its reopening standards in the regulations. Compare *id.* at 11-12 with Criteria for Reopening Records in Formal Licensing Proceedings, 51 Fed. Reg. 19535 (May 30, 1986). In any event, as discussed below, Pilgrim Watch has not demonstrated that reopening is necessary to reach a significant safety or environmental issue.” *Infra* at I.E.

all to a challenge it either originally opted not to make or which simply did not occur to it at the outset. Petitioners have an obligation to examine the application and publicly available information, and to set forth their claims at the earliest possible moment.

Duke Energy Corporation (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 428-29 (2003) (internal quotations omitted, alterations in original). In this instance, Pilgrim Watch has not shown good cause for its failure to file the contention in a timely fashion. Specifically, it has failed to show that it could not have raised the contention previously.

In support of the contention, Pilgrim Watch cites the recent events at Fukushima. New Contention at 24-25. Pilgrim Watch claims that these events show “properly trained and educated operators did not open the [DTV] when they should have because of their fear of the effect of large unfiltered radioactive releases on the population” and “when operators finally tried to vent they were unable to do so.” *Id.* at 31-32. But, Pilgrim Watch also cites many sources, several of which are decades old, that discuss these issues. For example, Pilgrim Watch cites an article from September of 1982 that urged the NRC to consider filtered venting. New Contention at 9 n. 7. Consequently, because the information was available earlier, Pilgrim Watch could have filed a contention on filtered venting when it filed its initial hearing request.

Moreover, Pilgrim Watch also argues that the events at Fukushima show the possibility that DTVs could fail in an accident. New Contention at 11-12. But, Pilgrim Watch’s pleading demonstrates that DTVs have been an important issue before the agency for years. New Contention at 13-19. In fact, the NRC issued requests for additional information on this same topic in 2005 in response to a license renewal application for Monticello. Response to Request for Additional Information Regarding Severe Accident Mitigation Alternatives for the Monticello Nuclear Generating Plant (TAC No. MC6441), Enclosure 1, at 17-18 (Jul. 27, 2005) (ADAMS Accession No. ML052130197). Moreover, to support this portion of its claim, Pilgrim Watch

cites a New York Times article that indicates members of the public had access to five-year-old correspondence regarding the potential for DTVs to fail during an accident. New Contention at 11-12 (citing Matthew L. Wald, *U.S. Was Warned on Vents Before Failure at Japan's Plant*, N.Y. TIMES, May 18, 2011, <http://www.nytimes.com/2011/05/19/science/earth/19nuke.html>).

Last, Pilgrim Watch asserts that because the DTV piping is buried, it “is susceptible to corrosion.” *Id.* at 20. But, Pilgrim Watch has already fully litigated the safety significance of buried piping in this case. *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC __ (Jun. 17, 2010) (slip op. at 8-29) (ADAMS Accession No. ML101680369). Moreover, Pilgrim Watch’s expert claims that his experience with Pilgrim Watch’s buried piping contention “applies directly to Pilgrim’s buried DTV piping.” New Contention at 34. Consequently, if Pilgrim Watch wished to raise concerns about the buried DTV piping in the SAMA context, it could have done so when it filed the initial hearing request. Pilgrim Watch has not even suggested that the Fukushima incident throws new light on this portion of its claim. Accordingly, the time to assert that the SAMA analysis was deficient was when the original contentions were filed in this matter, over five years ago. Pilgrim Watch’s New Contention is late and thus does not meet the requirements of 10 C.F.R. §§ 2.309(c)(1)(i) or 2.326(a)(1), (d).

Although the reopening standards require that petitions to reopen be filed in a timely fashion, boards may exercise discretion and grant a non-timely motion to reopen when it presents an exceptionally severe issue. 10 C.F.R. § 2.326(a)(1). While the situation at Fukushima is assuredly serious, that situation is not at issue here. In their previously filed affidavit, Dr. Bixler and Dr. Ghosh explained that the SAMA analysis is not a safety analysis; it is an environmental analysis conducted for the purpose of identifying cost-beneficial mitigation

alternatives that existing plant examinations may have missed.⁶ Thus, the SAMA analysis has no direct safety significance. The SAMA analysis merely augments existing programs to identify environmental mitigation alternatives that could “*further reduce* the risk at a plant that ha[s] no identified safety vulnerabilities.”⁷ Accordingly, it does not, and indeed it cannot, raise an exceptionally serious issue.

E. The New Contention Does Not Raise a Significant Environmental Issue

Under 10 C.F.R. § 2.326(a)(2), a motion to reopen must “address a significant safety or environmental issue.” Because Pilgrim Watch’s claims challenge the SAMA analysis, which is a part of the NRC’s environmental review, the New Contention raises an environmental issue. The Commission does not appear to have defined what type of environmental issue it would consider significant for the purposes of 10 C.F.R. § 2.326(a)(2). Nonetheless, the Atomic Safety and Licensing Appeal Board has stated that to demonstrate a significant safety issue, petitioners “must establish either that uncorrected … errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant’s capability of being operated safely.” *Public Service Company of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-940, 32 NRC 225, 243 (1990). In responding to a petition to waive an NRC regulation, the Commission observed that its “agenda is crowded with significant regulatory matters.” *Public Service Company of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 597 (1988). Thus, the Commission found, “It would not be consistent with the Commission’s statutorily mandated responsibilities to spend time and resources on matters that are of no substantive regulatory

⁶ Bixler and Ghosh Affidavit, at 4-5.

⁷ *Id.* at 5.

significance.” *Id.*

As stated above, NRC case law does not explicitly state what level of significance a motion to reopen the record to consider an environmental issue must demonstrate to satisfy 10 C.F.R. § 2.326(a)(2). In another context, the Commission has explained that challenges seeking to litigate issues beyond the normal scope of NRC adjudications must show significance to justify expending agency resources on further pursuing those topics. *Seabrook*, CLI-88-10, 28 NRC at 597. Moreover, a motion to reopen the record to address a safety issue must essentially challenge a plant’s capacity to operate safely. *Seabrook*, ALAB-940, 32 NRC at 243. Therefore, to demonstrate that further pursuit of the New Contention is warranted, Pilgrim Watch must demonstrate that it raises a “significant” environmental issue, one that is akin to a safety issue questioning a plant’s safe operation.

But, as Drs. Bixler and Ghosh explain, a challenge to a SAMA analysis, such as the one posed by the New Contention, is not likely to constitute a significant issue. The “SAMA analysis is a systematic search for potentially cost beneficial enhancements *to further reduce* nuclear power plant accident risk.” Bixler and Ghosh at 4. Drs. Bixler and Ghosh state that Pilgrim has already completed “an individual plant examination (IPE) and individual plant examination for external events (IPEEE) to search for any plant vulnerabilities.” *Id.* at 5. Thus, any cost-beneficial SAMAs would only “*further reduce* the risk from a plant that had no identified safety vulnerabilities.” *Id.* Consequently, in light of the redundancy between the SAMA analysis and previous plant examinations for vulnerabilities, the SAMA analysis, while an important part of the NRC’s environmental review, does not constitute a significant issue such as a claim that a plant could not operate safely. Moreover, the NRC, through its Taskforce, is currently conducting a review of the Fukushima incident and the NRC’s regulations. SRM-COMGBJ11-0002 (March 21, 2011) (ADAMS Accession No. ML110800456). This review, which will encapsulate many of the issues the New Contention raises, further decreases the significance

of Pilgrim Watch's claims. Indeed, Pilgrim Watch's request for the "Board to do likewise" reveals the duplicative nature of the New Contention.⁸ New Contention at 21. As a result, the New Contention does not meet the requirements § 2.326(a)(2) because Pilgrim Watch has not shown that the issues it raises are significant.⁹ Rather, it raises issues that have already been thoroughly studied and are being studied by the NRC in other contexts.

F. Pilgrim Watch's Attempt to Reopen the Record Is Not Supported by Expert Affidavit

In order to reopen the record, a petitioner must support its request with an affidavit from an expert. 10 C.F.R. § 2.326(b). In order to give an expert opinion, the individual proffered by the party must be qualified as an expert in the field of study at issue in the contention. *Progress Energy Florida, Inc.* (Combined License Application, Levy County Nuclear Power Plant, Units 1

⁸ Thus, holding an adjudicative hearing on a general policy topic that is still before the Commission risks reaching a result that is ultimately inconsistent with the Commission's response to Fukushima.

⁹ Pilgrim Watch also relies on *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989) to justify admission of the New Contention. Because *Marsh* requires an agency to consider new and significant information under NEPA, Pilgrim Watch contends that a new SAMA analysis is needed. New Contention at 4, 30. 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 quotations 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." Because, Pilgrim Watch has not demonstrated that reopening the record is necessary to reach a significant environmental issue, Pilgrim Watch has certainly not demonstrated that the information in the New Contention provides a "seriously different picture of the environmental impact" of relicensing. *Id.*

and 2), CLI-10-02, 71 NRC ____ (Jan. 7, 2010) (slip op. at 17) (ADAMS Accession No. ML103300201) (affirming appropriateness of board's evaluation of expert's qualifications in determination whether contention was adequately supported by expert opinion); *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP 09-07, 69 NRC 613, 639-40 (2009) (expert testimony dependent on witnesses' qualifications as experts regarding issues at bar); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-89-32, 30 NRC 375, 417 (1989); *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-05-04, 61 NRC 71, 81 (2005). Pilgrim Watch's attempt to reopen the record and its New Contention, however, are not supported by an affidavit from an expert in the field of study at issue.

To support the New Contention, Pilgrim Watch relies on the affidavit of Arnold Gundersen. Gundersen states that he holds a Master's Degree in Nuclear Engineering, began his career in the nuclear field in 1971, has served as an expert witness in other proceedings, and authored a report on decommissioning. He avers that he is familiar with a host of topics including,

Nuclear Plant Operation, Nuclear Management, Nuclear Safety Assessments, Reliability Engineering, In-service Inspection, Criticality Analysis, Licensing, Engineering Management, Thermohydraulics, Radioactive Waste Processes, Decommissioning, Waste Disposal, Structural Engineering Assessments, Cooling Tower Operation, Cooling Tower Plumes, Nuclear Fuel Rack Design and Manufacturing, Nuclear Equipment Design and Manufacturing, Prudency Defense, Employee Awareness Programs, Public Relations, Contract Administration, Technical Patents, Archival Storage and Document Control.

New Contention, Appendix A. Finally, Gundersen simply asserts that he is qualified to testify to the issues the New Contention raises. *Id*

The SAMA analysis is a probabilistic risk assessment designed to identify potentially cost-beneficial severe accident mitigation measures for the NRC's environmental review. Bixler and Ghosh Affidavit at 4. The Board has already noted the complexities within the SAMA

analysis in this case. “The underlying analyses require modeling of extremely complex time and physical condition dependent phenomena, which all those familiar with the field know are generally not amenable to accurate modeling.” *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), LBP-07-13, 66 NRC 131, 142 & n.12 (2007). In this approach, the SAMA analysis “compute[s] hundreds of scenarios which [a]re then weighted according to their probabilities[,] and then [develops] a distribution of probabilities of the consequences and risks.” *Id.* Moreover, Staff experts have testified that “it would require at least a doubling of benefits before the next SAMA on the candidate list could become potentially cost-beneficial.” Bixler and Ghosh Affidavit at 4.

While Gundersen asserts expertise in a plethora of areas, he does not state that he has relevant experience or training in SAMA analyses in particular or probabilistic risk analyses in general. New Contention, Appendix A. Although he claims familiarity with some aspects of Pilgrim Watch’s New Contention, he does not allege, let alone demonstrate, that he is qualified to determine whether those issues will be sufficient to change the cost benefit conclusions in the SAMA analysis. Therefore, contrary to the Commission’s requirements, Gundersen has not demonstrated that he is an expert in the field of probabilistic analyses, on which the SAMA analysis relies. Moreover, contrary to the plain requirements of § 2.326(b), Gundersen does not provide any technical or factual support for Pilgrim Watch’s claim that their pleading meets the other requirements of § 2.326(a). As a result, the Board should not admit the New Contention, because Pilgrim Watch has not produced an affidavit that meets the requirements of § 2.326(b).

II. Pilgrim Watch's New Contention Fails to Meet the Requirements for Admissibility in 10 C.F.R. § 2.309(f)(1).

In addition to meeting the requirements in 10 C.F.R. § 2.309(c), nontimely contentions must also meet the requirements of 10 C.F.R. § 2.309(f)(1) that apply to all contentions.¹⁰ *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-00-01, 51 NRC 1, 5 (2000); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station),

¹⁰ In order to be admitted, a contention must satisfy the following requirements:

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

(i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;

(ii) Provide a brief explanation of the basis for the contention;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to supports its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petition disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

10 C.F.R. § 2.309(f)(1).

LBP-93-23, 38 NRC 200, 205-207 (1993). Application of these requirements ensures that contentions raise matters appropriate for adjudication in the proceeding in which they are raised, establish a sufficient foundation to warrant further inquiry, and provide the other parties with sufficient notice of the issues so that they will know what they will have to address.

Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974). As the Commission noted when it revised the hearing regulations, it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.” Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,202 (Jan. 14, 2004).

Because the record in this proceeding is closed, Pilgrim Watch must set forth the basis of its new contention with “a degree of particularity in excess of the basis and specificity requirements contained in 10 C.F.R. § 2.714(b) [now § 2.309(f)(1)] for admissible contentions.” *Diablo Canyon*, ALAB-775, 19 NRC at 1366. See also *Oyster Creek I*, CLI-08-28, 68 NRC at 668 (“Commission practice holds that the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention.”). Support for Pilgrim Watch’s New Contention must “be more than mere allegations; it must be tantamount to evidence.” *Diablo Canyon*, ALAB-775, 19 NRC at 1366. In other words, the evidence must comport with the requirements for admissible evidence at hearing in 10 C.F.R. § 2.337—it must be relevant, material, and reliable. See *id* at 1366-67.

A. The New Contention Does Not Raise a Material Issue

To meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi), the New Contention must “demonstrate that the issue raised is material to the findings the NRC must make to support the action” and “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 Commission has indicated that the limited purpose of the SAMA analysis is to identify potentially cost-

beneficial SAMAs. *Pilgrim*, CLI-09-11, 69 NRC at 533; *Pilgrim*, CLI-10-11, 71 NRC __ (slip op. at 39). Thus, to raise a material issue, Pilgrim Watch must demonstrate that its challenges to the SAMA analysis would result in identification of additional, potentially cost-beneficial SAMAs. Pilgrim Watch cannot simply claim that “further analysis may refine the details in the SAMA NEPA analysis.” *Id.*

But, Pilgrim Watch has not made any demonstration, let alone one that would satisfy the requirements of § 2.326(a)(3), that the concerns raised in the New Contention could alter the SAMA analysis. See *supra*, section I.C. Rather, the New Contention only alleges that additional SAMAs “are likely to be justified,” that some benefit estimates are “ludicrous,” and that in light of new information some benefits “would far outweigh” the costs of implementation. New Contention at 22, 17, 29. Such vague suppositions do not constitute the “demonstration” contemplated by 10 C.F.R. § 2.309(f)(1)(iv) and (vi) for initial admissibility of contentions. Certainly, they do not constitute the “heightened” showing of admissibility needed to reopen the record. *Diablo Canyon*, ALAB-775, 19 NRC at 1366. Rather, they ask the Board to undertake precisely the type of “EIS editing session” the Commission has previously found would not meaningfully add to an NRC SAMA analysis. *Pilgrim*, CLI-09-11, 69 NRC at 532-33.

B. The New Contention Does Contain an Adequate Factual Basis

For each contention a petitioner seeks to admit, the petitioner must “provide a concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue.” 10 C.F.R. § 2.309(f)(1)(v). The Commission has concluded, “[m]ere ‘notice pleading’ is insufficient under these standards.” *Fansteel, Inc.*(Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003). “[B]are assertions and speculation [are] not enough to trigger an adversary hearing . . .” *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000). Thus, “[a] petitioner’s issue will be ruled inadmissible if the petitioner ‘has offered no tangible information, no experts, [or] no substantive

affidavits.” *Fansteel, Inc.*, CLI-03-13, 58 NRC at 203 (quoting *Oyster Creek*, CLI-00-5, 51 NRC at 207). Rather, “a petitioner may meet 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 must demonstrate how the facts upon which it relies support its contention. *Id.* (rejecting a contention that an ER failed to adequately evaluate the health impacts of a defective spent-fuel storage canister at a storage site when the petitioner failed to demonstrate “how a canister could become so contaminated that it would be harmful to workers at the storage site”).

Pilgrim Watch has not met the requirements of 10 C.F.R. § 2.309(f)(1)(v) because it has not produced adequate factual support for the New Contention. First, Pilgrim Watch claims that “[t]he absence of a filter [on] the DTV had significant negative unintended consequences at Fukushima, and this must be factored in here.” New Contention at 9. To support this statement, Pilgrim Watch relies on an article from the New York Times, which states, “ ‘Government officials have also suggested that one of the primary causes of the explosions was a several-hour delay in a decision to use the vents, as Tokyo Electric managers agonized over whether to resort to emergency measures that would allow a substantial amount of radioactive materials to escape into the air.’ ” *Id.* (quoting Matthew L. Wald, *U.S. Was Warned on Vents Before Failure at Japan’s Plant*, N.Y. TIMES, May 18, 2011, <http://www.nytimes.com/2011/05/19/science/earth/19nuke.html> (“Wald”)).¹¹ The Commission has previously noted that

¹¹ Although Pilgrim Watch attributes this quotation to a different article published the day earlier, the Staff was unable to find the quotation in that article. The quotation does appear in the article cited above.

newspaper articles present “evidentiary shortcomings” when relied on as a basis to reopen a record. *Oyster Creek I*, CLI-08-28, 68 NRC at 672.

Moreover, the article in this case states that Japanese regulators “ordered” the utility to vent. Wald at 2. But, in the United States, reactors are subject to a very different system of regulation, in which the NRC does not have to order a licensee to vent. Rather, licensees are trained to vent to protect containment integrity as needed. Expanded NRC Questions and Answers Related to the March 11, 2011 Japanese Earthquake and Tsunami, at 10 (June 14, 2011) (ADAMS Accession No. ML111650021). Consequently, this article does not establish how the Fukushima incident applies to United States reactors. Moreover, even if United States operators refrained from venting, the SAMA analysis already contains an uncertainty factor that accounts for human error. Pilgrim Nuclear Power Station, Applicant’s Environmental Report, Operating License Renewal Sage, Attachment E, at E.1-2 (Jan. 27, 2006) (ADAMS Accession No. ML060300029). Pilgrim Watch has not attempted to show how the facts cited in the newspaper article would impact the existing provision for human error in the uncertainty factor.

Next, Pilgrim Watch also contends that the Fukushima DTV’s failed for technological reasons. New Contention at 11. Specifically, Pilgrim Watch alleges that the DTVs failed because of the station blackout and that high radiation levels prevented the operators from opening them manually. *Id.* Once again, Pilgrim Watch appears to base this portion of its claim on a newspaper article. *Id.* 11-12 (citing Wald). Moreover, although the article attempts to explain the events at Fukushima, the article does not connect that incident with the SAMA analysis in the FSEIS. Although Pilgrim Watch speculates that the failure of the DTVs in Japan suggests that Pilgrim DTVs may also fail at a higher rate than previously assumed, Pilgrim Watch does not provide any information or testimony to indicate how that speculation will impact the SAMA analysis. Given the complexity of the SAMA analysis, as previously noted by the Board, vague assertions that the underlying assumptions in a SAMA analysis are too low cannot

meet the Commission's pleading requirements discussed above. *Pilgrim*, LBP-07-13, 66 NRC at 142 & n.12. Consequently, Pilgrim Watch has not provided adequate support for this portion of its SAMA contention because it has made no attempt to connect the underlying information to the assumptions and inputs in the SAMA analysis.

Finally, Pilgrim Watch claims that the DTV piping is buried and may have corroded since its installation in 1987. New Contention at 21. To support this contention, Pilgrim Watch relies on “[d]iscovery from Pilgrim Watch’s filings on the Aging Management Program for Buried Pipes and Tanks and Submerged Non-Environmentally Qualified Electric Cables.” New Contention at 21 n. 21. But, for each proffered contention, a petitioner must provide “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 “a Board is not to permit ‘incorporation by reference’ where the effect would be to circumvent NRC-prescribed ... specificity requirements.” *Consolidated Edison Co. of New York* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 132-33 (2001). “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.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-03, 29 NRC 234, 241 (1989). Clearly, Pilgrim Watch’s unfocused reference to these documents invites the Board, applicant, and Staff to scour the lengthy record in this proceeding to uncover some support for this claim. Such vague references cannot meet the Commission’s requirements for specific pleadings.

Second, the New Contention does not contain any information to suggest that the DTV piping has actually corroded. Rather, it relies on guesswork and assumptions: “*If* the pipe corrodes to the point that it develops a hole of any size, dirt and debris are *likely* to enter the hole. *If* the DTV is activated in an emergency, the dirt and debris *could* then be blown down the

line.” New Contention at 20-21 (emphasis added). Pilgrim Watch also speculates: “There is no basis upon which anyone can assume that the DTV piping has not been exposed to significant moisture.” Such statements constitute the pure speculation that the Commission has previously found insufficient to support an admissible contention. *Oyster Creek*, CLI-00-6, 51 NRC at 208.

Moreover, even if Pilgrim Watch had established sufficient evidence to support the inference that the buried piping for the DTV has corroded, the New Contention still does not connect that information to the SAMA analysis. Pilgrim Watch has not made any effort to show what impact deteriorated pipe would have on the SAMA analysis. Rather, Pilgrim Watch simply asserts that Entergy “must be required to conduct a new analysis – based on what Fukushima has taught about reality.” New Contention at 30. But, Pilgrim Watch has not provided any indication of how the previous analysis failed to account for the issues the New Contention raises. Consequently, Pilgrim Watch has not provided support for the admission of the New Contention that would meet the requirements of § 2.309(f)(1)(v) for the purposes of initial contention admissibility. This evidence certainly does not meet the heightened pleading requirements that a contention seeking to reopen the record must meet. *Diablo Canyon*, ALAB-775, 19 NRC at 1366.

CONCLUSION

As demonstrated above, Pilgrim Watch has failed to meet the requirements for reopening the record and its New Contention fails to meet the requirements for admissibility. Accordingly, the record should not be reopened to admit Pilgrim Watch's New Contention and, because the contention itself is inadmissible, it should be denied.

Respectfully submitted,

/Signed Electronically By/

Maxwell C. Smith
Counsel for NRC Staff
U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop: O15-D21
Washington, DC 20555
Telephone: (301) 415-1246
E-mail: Maxwell.Smith@nrc.gov

Dated at Rockville, Maryland
this 27th day of June 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "NRC Staff's Answer in Opposition to Pilgrim Watch's Request for Hearing on A New Contention Regarding Inadequacy of Environmental Report, Post Fukushima " has been served upon the following by the Electronic Information Exchange, this 27th day of June, 2011:

Administrative Judge
Richard F. Cole
Atomic Safety and Licensing Board Panel
Mail Stop: T-3F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: Richard.Cole@nrc.gov

Administrative Judge
Ann Marshall Young, Chair
Atomic Safety and Licensing Board Panel
Mail Stop: T-3F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: Ann.Young@nrc.gov

Atomic Safety and Licensing Board
Mail Stop: T-3F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
(VIA INTERNAL MAIL ONLY)

Administrative Judge
Paul B. Abramson
Atomic Safety and Licensing Board Panel
Mail Stop: T-3F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: Paul.Abramson@nrc.gov

Office of Commission Appellate
Adjudication
Mail Stop: O-16G4
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: OCAAMAIL.Resource@nrc.gov

Office of the Secretary
Attn: Rulemakings and Adjudications Staff
Mail Stop: O-16G4
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: Hearing.Docket@nrc.gov

Sheila Slocum Hollis
Duane Morris LLP
505 9th St., NW, Suite 1000
Washington, DC 20004
E-mail: sshollis@duanemorris.com

Mary Lampert
148 Washington Street
Duxbury, MA 02332
E-mail: mary.lampert@comcast.net

Chief Kevin M. Nord
Fire Chief & Director Duxbury Emergency
Management Agency
668 Tremont Street
Duxbury, MA 02332
E-mail: nord@town.duxbury.ma.us

Richard R. MacDonald
Town Manager
878 Tremont Street
Duxbury, MA 02332
E-mail: macdonald@town.duxbury.ma.us

Terence A. Burke, Esq.
Entergy Nuclear
1340 Echelon Parkway
Mail Stop: M-ECH-62
Jackson, MS 39213
E-mail: tburke@entergy.com

David R. Lewis, Esq.
Paul A. Gaukler, Esq.
Pillsbury, Winthrop, Shaw, Pittman, LLP
2300 N Street, NW
Washington, DC 20037-1137
E-mail: david.lewis@pillsburylaw.com
paul.gaukler@pillsburylaw.com

Town Manager
Town of Plymouth
11 Lincoln St.
Plymouth, MA 02360
E-mail: marrighi@townhall.plymouth.ma.us

Matthew Brock
Assistant Attorney General
Commonwealth of Massachusetts
One Ashburton Place
Boston, MA 02108
Martha.Coakley@state.ma.us
Matthew.Brock@state.ma.us

/Signed Electronically By/

Maxwell C. Smith
Counsel for the NRC Staff