

July 26, 2006

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DOCKETED
USNRC

In the Matter of)
)
Entergy Nuclear Operations, Inc.)
)
(Pilgrim Nuclear Power Station))
)

Docket No. 50-293

July 27, 2006 (8:53am)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

**MASSACHUSETTS ATTORNEY GENERAL'S REPLY BRIEF REGARDING
RELEVANCE TO THIS PROCEEDING OF REGULATORY GUIDE'S
DEFINITION OF "NEW AND SIGNIFICANT INFORMATION"**

I. INTRODUCTION

Pursuant to the Atomic Safety and Licensing Board's ("ASLB's") Order of July 14, 2006, the Attorney General of Massachusetts ("Attorney General") submits this reply brief regarding the relevance to this proceeding of the definition of "new and significant information" found in the U.S. Nuclear Regulatory Commission's ("NRC's" or "Commission's") Regulatory Guide 4.2S1, Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses (September 2000) ("Reg. Guide 4.2S1").

Entergy and the NRC Staff agree with the Attorney General that while the guidance in Reg. Guide 4.2S-1 is not binding, it is relevant and applicable in this case.¹ Nevertheless, they argue that the information presented in the Attorney General's contention regarding the risks of spent fuel pool fires does not constitute "new and significant information" under the standard established in 10 C.F.R. § 51.53(c)(3)(iv) and

¹ Entergy's Brief on New and Significant Information in Response to Licensing Board Order of July 14, 2006 at 6-7 (July 21, 2006) ("Entergy Brief"); NRC Staff's

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Reg. Guide 4.2S-1.² As discussed below, their arguments are inconsistent with the National Environmental Policy Act (“NEPA”), well-established case law, and the Commission’s expressed intent in promulgating the regulations for review of license renewal applications under NEPA. Moreover, their arguments rest on incorrect characterizations of the content of relevant environmental impact statements (“EISs”) and other environmental analyses by the NRC.

In the basis of his contention, the Attorney General satisfied the NRC’s standard for admission of his concern that Entergy has failed to satisfy the requirement of 10 C.F.R. § 51.53(c)(3)(iv) to address new and significant information regarding the potential for and consequences of a severe accident in the Pilgrim spent fuel pool by providing “sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.” 10 C.F.R. § 2.309(f)(1)(vi). Rather than demonstrating the Attorney General’s failure to meet the NRC’s admissibility

Response to July 14, 2006 Licensing Board Order at 2-3 (July 21, 2006) (“NRC Staff Brief”).

² The contention was submitted in Massachusetts Attorney General’s Request for a Hearing and Petition to Intervene With Respect to Entergy Nuclear Operations Inc.’s Application for Renewal of the Pilgrim Nuclear Plant Operating License, etc. (May 26, 2006) (“Hearing Request”). Entergy and the NRC Staff responded in Entergy’s Answer to Massachusetts Attorney General’s Request for a Hearing, Petition to Intervene, and Petition for Backfit Order (June 22, 2006) (“Entergy Answer”) and NRC Staff’s Answer Opposing Massachusetts Attorney General’s Request for Hearing and Petition to Intervene and Petition for Backfit (June 22, 2006) (“NRC Staff Answer”). The Attorney General replied to Entergy’s and the Staff’s oppositions to the admission of his contention in Massachusetts Attorney General’s Reply to Entergy’s and NRC Staff’s Opposition to Hearing Request and Petition to Intervene With Respect to License Renewal Application (June 29, 2006) (“Mass AG Reply”). An oral argument regarding the admissibility of contentions submitted by the Attorney General and Pilgrim Watch was held on July 6-7, 2006, in Plymouth, Massachusetts. (The transcript of the oral argument is cited as “Tr.”).

standard, Entergy's and the NRC Staff's briefs only confirm the existence of a genuine and material dispute between the parties.

II. DISCUSSION

A. Entergy's Interpretation of the term "New" is Inconsistent with NEPA and the Commission's Intent in Promulgating the License Renewal Rule.

Reg. Guide 4.2S1 interprets the term "new and significant information," as used in 10 C.F.R. § 51.53(c)(3)(iv), to consist of:

(1) information that identifies a significant environmental issue that was not considered in NUREG-1437 and, consequently, not codified in Appendix B to Subpart A of 10 CFR Part 51, or (2) information that was not considered in the analyses summarized in NUREG-1437 and that leads to an impact finding different from that codified in 10 CFR Part 51.

Id. at 4.2-S-4. The Attorney General, Entergy and the NRC Staff are in agreement that the second prong of the Reg. Guide 4.2S-1 test is applicable here, because the contention relates to significant new information rather than a significant new issue. Entergy Brief at 9, NRC Staff Brief at 3.

Entergy's interpretation of what information should be considered "new," however, is inconsistent with NEPA and the Commission's expressed intent in promulgating the license renewal rule. According to Entergy:

The Regulatory Guide does not state that anything not explicitly discussed is new, but rather only information that was not considered. Entergy understands this recommendation to mean that information is new if it was not within the knowledge base on which the analyses in the GEIS are based. This knowledge base includes any studies or reports that were referenced in the GEIS, as well as other publicly available information *that would have been within the knowledge of a reasonable NRC reviewer* at the time that the GEIS was prepared.

Entergy Brief at 9 (emphasis added). Thus in Entergy's view, even if the significance of environmental information was not addressed in a previous EIS, it should be deemed to

have been considered if it was mentioned or cited, or even if it *existed* at the time the EIS was written. *See also* NRC Staff Brief at 9.

This interpretation of Reg. Guide 4.2S-1 runs afoul of the Commission's expressed intent in promulgating the license renewal rule. In the preamble to the Final Rule regarding Environmental Review for Environmental Review of Nuclear Power Plant Operating Licenses, the Commission announced its intention to determine whether comments on draft supplemental EISs introduce "new and significant information *not considered in the GEIS analysis.*" 61 Fed. Reg. 28,467 28,470 (June 5, 1996) (emphasis added). Thus, the Commission's own test is whether information was actually considered, not whether it should have or could have been considered.

Entergy's interpretation of Reg. Guide 4.2S-1 is also inconsistent with NEPA and the massive body of case law interpreting NEPA. NEPA requires that to the "fullest extent possible," agencies should address the environmental impacts of their actions. 42 U.S.C. § 4332(C). *See also Calvert Cliffs' Coordinating Comm. v. Atomic Energy Commission*, 449 F.2d 1109,1115 (D.C.Cir. 1971) ("NEPA mandates a particular sort of careful and informed decisionmaking process"). Thus, the EIS regarding the environmental impacts of a major federal action must be "detailed." 42 U.S.C. § 4332(C). This requirement ensures that in reaching its decision, an agency "will have available, *and will carefully consider*, detailed information concerning significant environmental impacts." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) ("Robertson") (emphasis added). *See also Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374 (1989) ("Marsh") (NEPA requires agencies to "take a 'hard look' at the environmental effects of their planned action, even after a

proposal has received initial approval”). The GEIS’ vague statement that “[c]urrent and potential environmental impacts from spent-fuel storage have been studied extensively and are well understood” does not satisfy this rigorous standard. *See* Entergy Brief at 10.

Entergy’s position is all the more untenable in the face of the Attorney General’s careful analysis of the history of the NRC’s NEPA consideration of spent fuel pool accident risks, which shows that in fact all of the NRC’s previous NEPA analyses were based on the faulty assumptions that (a) total instantaneous drainage is a more severe case than partial drainage and (b) aged fuel will not burn. Hearing Request at 22. Neither Entergy nor the NRC Staff can point to any NRC NEPA study that “carefully considers” [*Robertson*, 490 U.S. at 349] the environmental implications of correctly assuming that (a) partial pool drainage can be a more severe condition than instantaneous total drainage and (b) a pool fire cannot be ruled out based on the age of the fuel in the pool.³ To the contrary, four years *after* publication of the GEIS, when Dr. Thompson asserted that aged fuel could burn if it were partially uncovered, the Staff criticized his view.⁴ Entergy has no basis for suggesting that the License Renewal GEIS would have explicitly or implicitly addressed spent fuel behavior or characteristics that the NRC technical staff did not consider credible.

³ *See* NUREG-1738, Final Technical Study of Spent Fuel Pool Accident Risk and Decommissioning Nuclear Power Plants at 2-1 – 2-2 (January 2001) (“NUREG-1738”); NAS Committee on the Safety and Security of Commercial Spent Nuclear Fuel Storage, *Safety and Security of Commercial Spent Nuclear Fuel Storage* at 53-54 (The National Academies Press: 2006) (“NAS Report”); Thompson, *Risks and Risk-Reducing Options Associated with Pool Storage of Spent Nuclear Fuel at the Pilgrim and Vermont Yankee Nuclear Power Plants*, § 2 (May 25, 2006) (“Thompson Report”).

⁴ *See* Mass AG’s Reply at 15 and note 13, citing NRC Staff Response to Intervenor’s Request for Admission of Late-Filed Environmental Contentions at 21-22 (March 3, 2000), Docket 50-400 (“Dr. Thompson’s is the only opinion of which the Staff

B. 10 C.F.R. § 51.53(c)(3)(iv) and Reg. Guide Set an Objective Standard for Reporting of New and Significant Information.

Entergy argues that the language of 10 C.F.R. § 51.53(c)(3)(iv) and Reg. Guide 4.2S-1 which requires the reporting of new and significant information “of which the applicant is aware” excuses it from addressing information that “some other party thinks is significant.” Entergy Brief at 6-7. The test for what constitutes new and significant information, however, is an objective one. The relevant question is whether the information satisfies the criteria in Reg. Guide 4.2S-1, not whether Entergy is subjectively aware of the information.⁵

Entergy also argues that under Reg. Guide 4.2S-1, it is not required to “analyze or revalidate Category 1 issues.” Entergy Brief at 7. But both the Reg. Guide itself and the regulatory history of the License Renewal rule make it clear that Category 1 issues must be re-evaluated if new information shows that a previous conclusion regarding environmental impacts was incorrect.⁶

is aware that holds that fuel five years or more out of the reactor is susceptible to zircaloy/fire exothermic reaction.”)

⁵ See Mass AG Reply at 5-9, Tr. at 131-32. Moreover, if Entergy is correct that the license renewal applicant has no regulatory obligation other than to report on new and significant information of which it is subjectively aware, the principal effect of that interpretation would be to delay the time for raising concerns about new and significant information to the stage when the draft Supplemental EIS is prepared. At that point, under *Marsh*, the NRC Staff would have a clear obligation to consider new and significant information bearing on the environmental impacts of the proposed licensing action. To delay the time for raising new and significant information to the time of publication of the Supplemental GEIS, however, would undermine 10 C.F.R. § 2.309(f)’s purpose of ensuring that environmental issues are raised as early as possible by requiring petitioners to address deficiencies in the environmental report. Final Rule, Rules of Practice for Domestic Licensing Proceeding – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,172 (August 11, 1989). See also Mass AG Brief at 5.

⁶ Massachusetts Attorney General’s Brief Regarding Relevance to this Proceeding of Regulatory Guide’s Definition of “New and Significant Information” at 4-5 (July 21, 2006) (“Mass AG Brief”). See also Mass AG Reply at 5-9, Tr. at 134-38.

Finally, Entergy argues that the “only relevance” of the new and significant information standard in Reg. Guide 4.2S-1 is in the context of a waiver or rulemaking petition. Entergy Brief at 4-5. *See also* NRC Staff Brief at 2. The Attorney General has thoroughly addressed that argument in previous briefs and oral argument, and therefore refers the ASLB to his Reply at 9-11, Tr. at 140-43, and Mass AG Brief at 7.

C. The Information in the Attorney General’s Contention is Both New and Significant.

1. The GEIS underestimates the likelihood of a pool fire.

As the Attorney General’s contention demonstrates, the overall likelihood of a pool fire is much larger than predicted in the GEIS, in part because the GEIS significantly underestimates the likelihood of one of the steps in the chain of causation, *i.e.*, the conditional probability of a pool fire once the fuel is uncovered. Hearing Request at 30-32.

Entergy mischaracterizes a pool fire as a “consequence” rather than a cause of an accident, and argues that it is therefore “irrelevant.” Entergy Brief at 11. In fact, the conditional probability of a pool fire is an attribute of accident cause, not consequence: it is relevant to one step in a chain of causative events leading to the consequence of an offsite exposure to radioactivity. *See* Thompson Report at 18-21. The Attorney General’s contention presents new and significant information showing that once fuel is uncovered, the conditional probability of a pool fire is much higher than predicted in the License Renewal GEIS. Hearing Request at 32. Moreover, accident sequences that could cause uncovering of the fuel have a probability within the range considered worthy of consideration in an EIS. *Id.* Thus, the likelihood of the entire chain of events leading to

offsite exposure is relevant to whether the information presented in the contention is new, not just the likelihood of the initiating event.⁷

2. The GEIS did not consider the information raised by the Attorney General regarding severe pool accidents.

Entergy asserts that the License Renewal GEIS considered partial pool drainage accidents because the GEIS is based on a “long series of technical studies dating back to 1979 and before” which include consideration of partial drainage accidents. Entergy Brief at 13. *See also* NRC Staff Brief at 4. The two principal technical studies to which Entergy and the Staff refer are NUREG-1353, *Regulatory Analysis for the Resolution of Generic Issue 82, Beyond Design Basis Accidents in Spent Fuel Pools* (April 1989) (“NUREG-1353”) and NUREG/CR-0649, *Spent Fuel Heatup Following Loss of Water During Storage* (March 1979) (“1979 Sandia Report”).

a. NUREG-1353

Entergy claims that NUREG-1353, which is cited in the License Renewal GEIS, considers partial drainage. Entergy Brief at 15 n.13. In fact, as NUREG-1353 makes abundantly clear, its technical analysis of the potential for ignition of uncovered fuel assumes total and instantaneous drainage. *Id.* at 4-8. *See also* Mass AG Reply at 18-19. The findings of NUREG-1353 with regard to the probability of a pool fire rest upon the output of the computer code SFUEL1W, which assumes that “the water drains instantaneously from the pool.” *Id.* The SFUEL1W computer analysis provides the basis for NUREG-1353’s erroneous findings regarding the probability of a pool fire. Thus,

⁷ The Attorney General previously addressed Entergy’s argument on page 13 of its Brief that in the Waste Confidence Decision the Commission concluded that “‘even if the timing of the pool failure were conducive to fire,’ the likelihood of such events causing a spent pool fire is ‘extremely rare.’” Mass AG Reply at 16-17.

NUREG-1353's quantitative estimates and qualitative judgments about the potential for pool fires rest on the study's key – and incorrect -- assumption of total and instantaneous drainage.⁸ To the extent that the Waste Confidence Rule and the License Renewal GEIS rely on NUREG-1353 for their conclusions about the potential for pool fires, they are also incorrect.

Moreover, Entergy's Table 1, which purports to represent probability estimates in NUREG-1353, is misleading. Entergy Brief at 14. Table 1 is entitled "Probability of Spent Fuel Pool Drain-down or Boil-down." But the probability estimates quoted in the table are taken from a table in NUREG-1353 that addresses the "*frequency of spent fuel damage* resulting from accident sequences which can result in the loss of water from the spent fuel pool through either drainage or through boiling as a result of loss of cooling." *Id.* at 4-36 (emphasis added). As discussed above, NUREG-1353 assumed that the condition that would cause spent fuel damage is complete loss of water from the pool.⁹

⁸ The assumption of complete and instantaneous drainage was also made in NUREG/CR-4982, *Severe Accidents in Spent Fuel Pools in Support of Generic Safety Issue 82* (1987). Thompson Report at 16. Thus the NRC Staff's argument that the possibility of a spent fuel pool fire in a densely packed pool was considered in NUREG/CR-4982 is incorrect in the crucial respect that the report did not consider partial drainage conditions. NRC Staff Brief at 10.

⁹ The NUREG-1353 text cited in Entergy's Table 1 also shows that in evaluating the potential for spent fuel damage, the writers of NUREG-1353 were concerned with total loss of water from a spent fuel due to "structural failure" of the pool or "serious" loss of water through drainage. *See, e.g.*, NUREG-1353 at 4-14 (estimating the probability of the "structural failure of the spent fuel pool from a missile resulting in a loss of cooling of the spent fuel is less than 1×10^{-7} , on the order of 1×10^{-8} per year"); *id.* (estimating the "probability of structural failure" of the spent fuel pool due to airplane crashes at 6×10^{-9}); *id.* at 4-15 (stating that the pool wall could "suffer severe damage as a result of a cask drop" and estimating the probability of a "structural failure of the pool" due to a cask drop at 3×10^{-7} per year); *id.* at 4-19 (evaluating potential for "serious loss of pool water," combined with failure to take recovery actions, at 3×10^{-8}).

Entergy also ignores another important respect in which NUREG-1353 failed to consider new and significant information relevant to the environmental impacts of pool storage of spent fuel: with respect to boiling water reactors (“BWRs”), NUREG-1353 estimated that if a pool were drained, the conditional probability of ignition of BWR fuel was 0.25. *Id.* at 4-11. In reaching this estimate, the NRC Staff modeled “directional” storage conditions, not high-density storage conditions. As discussed in NUREG-1353, directional fuel storage racks place spent fuel assemblies in rows. *Id.* Within each row of the BWR storage racks modeled in NUREG-1353, the center-to-center distance between fuel assemblies was six inches, but the rows were separated by a 5.3-inch “open space.” *Id.* In contrast, today’s high-density storage racks have the same high density in both horizontal directions. At the Pilgrim plant, for example, the center-to-center distance between fuel assemblies is six inches apart in both directions. Thompson Report at 17. That is the closest possible spacing for BWR fuel. At this spacing, heat transfer from exposed fuel would be heavily inhibited. By contrast, the presence of a 5.3-inch open space between rows, as assumed in NUREG-1353, would allow a much higher rate of heat transfer from exposed fuel. Thus, as Thompson concludes in his report, NUREG-1353 significantly underestimates the potential for ignition of BWR fuel. *Id.* at 17. *See also* Mass AG Reply at 17-18. Accordingly, Entergy errs in claiming that Dr. Thompson failed to demonstrate that NUREG-1353’s estimates of “accident induced probabilities of pool drain-down or boil-down” were incorrect. Entergy Brief at 15.

Entergy also argues that in postulating a spent fuel pool accident accompanied by a reactor accident, Dr. Thompson “ignored that, even in such an event, pool drain-down due to structural failure of the pool or pool boil-down due to loss of cooling or make-up

water capability must still occur *before* a spent fuel pool fire could be triggered.”

Entergy Brief at 15. According to Entergy, Dr. Thompson’s conditional probability estimate of 50% for a pool fire in the event of a reactor accident ignores the ASLB’s conclusion in the *Harris* proceeding that there are only “limited circumstances” after containment failure in which cooling would be lost, and distorts the testimony of the other parties to the *Harris* case. Entergy Brief at 15 and n.24.

Entergy’s argument does not accurately reflect Dr. Thompson’s report or the testimony that was given by Dr. Thompson and the other parties to the *Harris* case. In his report, Dr. Thompson stated that:

[T]he technical submissions of all three parties agreed that the onset of a pool fire in two of the [four] pools in the Harris pool building would preclude the provision of cooling and water makeup to the other two pools. This effect would arise from the spread of hot gases and radioactive material throughout the pool building, which would preclude access by operating personnel. Thus, the pools not involved in the initial fire would boil and dry out, and their fuel would burn.

Thompson Report at 21. Experts for the licensee and the NRC Staff in the *Harris* case agreed that the contaminated in-building environment arising from a fire in Harris pools A and B would preclude personnel access for the purpose of providing cooling or makeup water to pools C and D. *Id.* See also Mass AG Reply at 26, which provides relevant quotations from the licensee and NRC Staff experts. Because the Pilgrim fuel pool is in the reactor building, a reactor accident would lead to the presence of extremely hot gases and high levels of radiation throughout that building, including the regions of the building that house the spent fuel pool and its supporting systems. Thompson Report at 21. Just as in the *Harris* case hot gases and high radiation levels in the Harris fuel building were conceded by all parties to preclude provision of cooling or makeup water to the pools that had not yet boiled dry, so they would preclude provision of cooling or makeup to the

Pilgrim pool. Notably, in the Harris case the licensee and NRC Staff assumed a conditional probability of one for a fire in pools C and D, given a fire in pools A and B. Dr. Thompson's estimate of a 50% probability in the instant case is less conservative.

Contrary to Entergy's statement that the experts assumed loss of coolant had already occurred in both pools, the experts assumed only that a loss of coolant had occurred in pools A and B. As stated in Carolina Power & Light's ("CP&L's") expert report, "[spent fuel pools] A and B may lose water inventory prior to SFPs C and D under certain postulated severe accidents." *See* Mass AG Reply at 26. CP&L's expert concluded that "[t]he consequences of loss of water inventory in pools A and B could in turn adversely impact both access and further prevention actions related to pools C and D." Dr. Thompson's comparison of this hypothetical accident to Pilgrim, where high radiation levels in the reactor building could preclude access to fuel stored in the same building, is apt.¹⁰

b. 1979 Sandia Report

While the 1979 Sandia Report did consider partial pool drainage, it was not mentioned in the License Renewal GEIS. Thompson Report at 11. According to Entergy, however, the 1979 Sandia Report "was one of the authoritative sources extensively relied upon and subsumed within the technical analyses underlying the Commission's Waste Confidence Decision and the GEIS." Entergy Brief at 21. But this assertion is not supported by the record. First, Entergy overstates its case by using the plural for "sources" and "analyses"; the only source or technical analysis underlying the Waste Confidence Rule that Entergy identifies is NUREG-1353. Second, the important

¹⁰ *See also* tr. at 271-79.

conclusion of the 1979 Sandia Report that “an incomplete drainage [of the pool] can potentially cause a more severe heatup problem than a complete drainage” [quoted in Entergy’s Brief at page 21] cannot be found on the pages of NUREG-1353 referenced by Entergy. Instead, NUREG-1353 contains only the cryptic statement that “[t]he results of work performed by Sandia . . . suggested that in certain fuel racking configurations (a) a self-sustaining zirconium-air oxidation reaction can be initiated, and (b) this self-sustaining reaction can propagate from one region of the pool to another.” NUREG-1353. Thus, Entergy offers no basis for concluding that the drafters of NUREG-1353 fully understood the significance of the 1979 Sandia Report. To the contrary, as pointed out in the Attorney General’s Reply at page 15, the NRC Staff’s own characterization of NUREG-1353 in the Shearon Harris case indicates that the NUREG-1353 did not incorporate the most important conclusions of the 1979 Sandia Report.

c. Waste Confidence Rule

Entergy also claims that the text of the Waste Confidence Rule shows that the Commission “expressly considered” a comment by Public Citizen that high-density spent fuel storage racks would “severely” restrict air flow and result in “very vigorous” oxidation and failure of the fuel rods. Entergy Brief at 23, citing 55 Fed. Reg. 38,474, 38,481 (September 18, 1990). But a single sentence from that discussion [which happens to be quoted in full at pages 5-6 of the NRC Staff’s Brief], only serves to highlight the erroneous assumptions on which the Commission relied for its rejection of Public Citizen’s comment:

It should be noted that for a zircaloy cladding fire in a spent fuel storage pool, an earthquake or other event *causing a major loss of cooling water* would have to occur *within two years after operation of a PWR or six months after operation of a BWR.*”

See NRC Staff Brief at 5, quoting 55 Fed. Reg. at 38,481-82 (emphasis added). As since confirmed by NUREG-1738, the NAS Report, and the Thompson Report, neither a major loss of cooling water nor the presence of unaged fuel in the pool is necessary for the ignition of the fuel. Notably, this new and significant information has not been considered in any NRC NEPA analysis.¹¹ Thus, Entergy and the Staff have failed to support their claim that the NRC considered new and significant information regarding the potential for accidents in high-density spent fuel storage pools in the License Renewal GEIS. At the very most, they have demonstrated that there is a genuine factual and legal dispute between the parties.¹²

3. The GEIS did not consider new and significant information regarding the impacts of attacks on the Pilgrim pool.

Both Entergy and the NRC Staff argue that the Attorney General's information about the potential for intentional attacks on the Pilgrim fuel pool is not "new" because the NRC already has addressed the impacts of sabotage events in the License Renewal GEIS. Entergy Brief at 19, NRC Staff Brief at 8. This argument is without a legal or factual basis, as discussed in the Mass AG's Reply at pages 27-30. See also Tr. at 74-79.

4. The GEIS did not consider new and significant information

¹¹ The NRC Staff cites various non-NEPA reports and pieces of correspondence to the effect that the Attorney General's concerns do not need to be addressed in a hearing because they already have been addressed. See, e.g., NRC Staff Brief at 11-14. As discussed in the Attorney General's Reply at page 21-22, NEPA requires that environmental impacts must be addressed and circulated for comment in a draft EIS. It is not sufficient to purport to resolve them in some non-NEPA document.

¹² Entergy and the Staff try to downplay the significance of NUREG-1738 by repeatedly citing the report's ultimate conclusion that the probability of a spent fuel pool accident is very low. Entergy Brief at 16-18, NRC Staff Brief at 6, 7, 11, 14. As the Attorney General has pointed out, however, *this conclusion relates only to decommissioning nuclear power plants*. Mass AG Reply at 13-14. NUREG-1738 itself acknowledges that the risk of spent fuel pool accidents at operating plants is higher. *Id.*

regarding accident consequences.

Entergy and the NRC Staff also claim that the Attorney General has failed to present new information regarding the consequences of a spent fuel pool accident, because the consequences already were addressed in NUREG-1353 and deemed to be similar to the consequences of reactor core accidents. Entergy Brief at 20, NRC Staff Brief at 12. In fact, as Entergy recognizes, NUREG-1353 said only that the consequences "could" be similar. Entergy Brief at 20. This vague statement hardly qualifies as the "careful consideration" required by NEPA. Moreover, neither Entergy nor the NRC Staff argue that the License Renewal GEIS actually adopted the portion of NUREG-1353 that discusses accident consequences. In fact, there would have been no point in doing so, because NUREG-1353's accident probability estimates were so low.

III. CONCLUSION

Because the Attorney General's contention shows, with specificity and basis, that Entergy failed to satisfy 10 C.F.R. § 51.53(c)(3)(iv) by discussing new and significant information regarding the environmental impacts of continued high-density pool storage of spent fuel, the contention should be admitted.

Respectfully submitted,
COMMONWEALTH OF MASSACHUSETTS

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I certify that on July 26, 2006, copies of the foregoing Massachusetts Attorney General's Reply Brief Regarding Relevance to This Proceeding of Regulatory Guide's Definition of "New and Significant Information" were served on the following by first-class mail and/or electronic mail, as indicated below:

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